TOMCAT®
COMMERCIAL CLEANING EQUIPMENT

RS

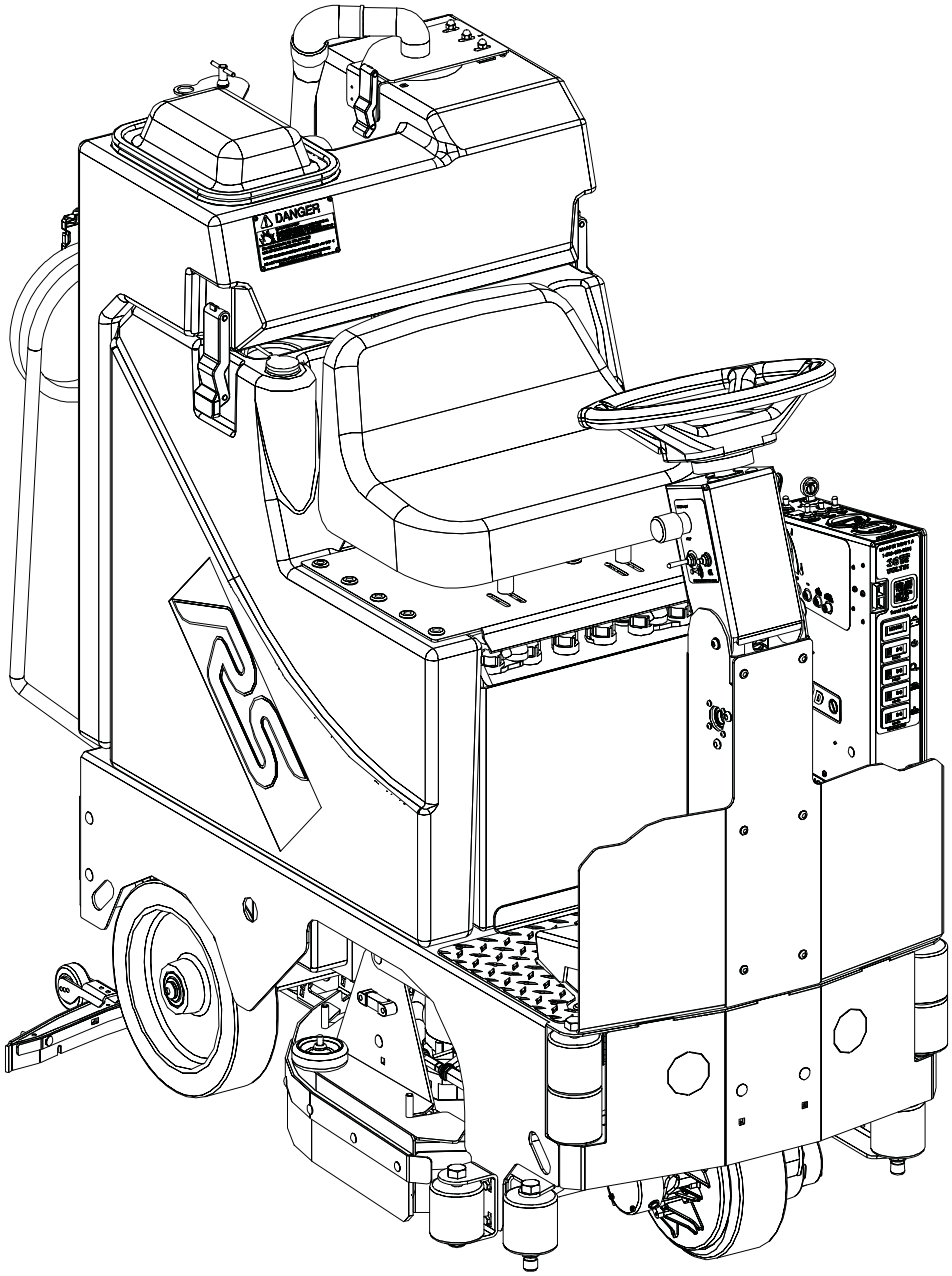
Operating Instructions (EN)

MODELS:

20" Disk
26" Disk
28" Dlisk

24" Cylindrical

24" EDGE
28" EDGE



Read these Instructions before using the machine.

Read these Safety Messages before using the machine.

Scan With Phone for more Information

www.tomcatequip.com
1711 South Street
Racine, WI 53404 (USA)
(800) 450-9824 | (+001) 262-681-6470
© 2015 RPS Corporation

VERSION 15.167
RS-OP-EN

INTRODUCTION

This manual is furnished with each new machine. This manual will allow the Operator to get the best performance out of your RPS manufactured Scrubber-Drier, Sweeper, Burnisher, or Orbital Scrubber. Read this manual thoroughly before operating or servicing the machine.

This machine will provide excellent performance, but the best results will be obtained at the most minimum costs if:

• The machine is regularly maintained - per the machine Preventative Maintenance instructions provided.

• The machine is operated with reasonable care and caution.

• The machine is maintained with manufacturer supplied parts.

ABOUT THIS MANUAL

TABLE OF CONTENTS: Tells you where to look in the manual.

SAFETY MESSAGES: Section contains important information regarding hazard or unsafe practices of the machine. Levels of hazards are identified that could result in product or personal injury, or severe injury resulting in death.

OPERATION CONTROLS / MACHINE COMPONENTS: Shows you the different machine controls and features.

MACHINE SETUP: Tells you how to setup machine from un-crating to installing squeegee and brushes.

MACHINE OPERATION: Section is to familiarize the operator with the operation and function of the machine.

BATTERY CHARGING: Shows you how to charge the batteries (on-board and off board charging).

MAINTENANCE: This section contains preventative maintenance to keep the machine and it's components in good working condition. They are listed in this general order:

- Batteries
- Scrub Brushes
- Adjusting Squeegee
- Service Schedule
- Machine Trouble Shooting

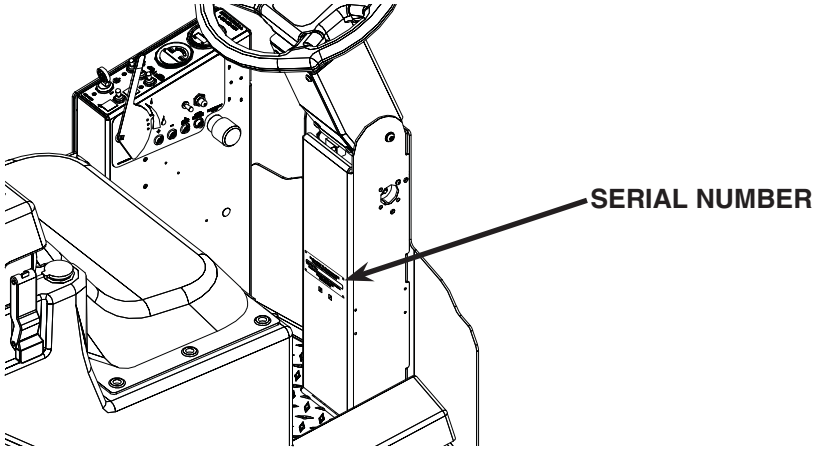
TROUBLE SHOOTING: A list of common problems that may occur.

MACHINE SPECS: Tells you Machine Specifications for the various parts of the machine.

MACHINE INSTALL FORM: Should be filled out upon machine installation and faxed to 1-866-632-6961 or online at www.rpscorporation.com.

WARRANTY POLICY: Tells you coverage, exclusions and limitations to warranty.

NOTE: The serial number of your machine is located on the lower half of the control panel of the machine.



AS OUR POLICY IS ONE OF CONSTANT IMPROVEMENT - ALL INFORMATION AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

TABLE OF CONTENTS

Introduction 2

About This Manual 2

Table of Contents 3

Safety Messages 4

Safety Label Locations 6

Operation Controls 7

Operation Controls 8

Machine Components 9

Machine Setup 10

- **Un-Crating Machine:** 10
- **Connecting Batteries:** 10
- **Adjusting Squeegee:** 11
- **Removing Squeegee:** 11
- **Replacing or Rotating Squeegee Blades:** 11
- **Installing Disk Pad Driver or Brush:** 12
- **Installing Driver Pads:** 12
- **Leveling Disk Decks:** 13
- **Adjust Disk Shroud Wipers:** 13
- **Adjust Disk Shrouds:** 13
- **Installing Cylindrical Brush:** 14
- **Leveling Cylindrical Decks:** 15
- **Adjust Cylindrical Wipers Blades:** 15
- **Installing EDGE Pads:** 16
- **Leveling EDGE Decks:** 16
- **Adjust EDGE Shroud Wipers:** 17
- **Adjust EDGE Shrouds:** 17

Machine Operation 18

- **Pre-Cleaning Checklist:** 18
- **Operating Hints:** 18
- **One Pass Scrubbing:** 19
- **Vacuum Only:** 19
- **Adjust Solution Flow:** 19
- **Draining Recovery Tank:** 20
- **Flush Recovery Tank:** 20
- **Draining Solution Tank:** 20
- **Solution Filter:** 21
- **Cleaning Solution Filter:** 21
- **Squeegee Up:** 21
- **Squeegee Down:** 21
- **Clean Vacuum Screen:** 22
- **Releasing Parking Brake Override Lever:** 22

Battery Charging 23

- **External Battery Charging:** 23

On-Board Charger 24

- **On-Board Battery Charging (Optional):** 24
- **Description of LED** 24

Battery Maintenance Guide 25

- **Safety:** 25
- **Inspection and Cleaning:** 25
- **Storage:** 25
- **Watering:** 25

Maintenance 26

- **Daily Maintenance:** 26
- **Weekly Maintenance:** 26
- **Monthly maintenance:** 26
- **Yearly Maintenance:** 26
- **Storing Machine:** 26
- **Checking Battery Specific Gravity:** 26

RS PM Records 27

RS Wiring Guide 29

Trouble-shooting 30

Machine Specs 32

Common Wear Parts 33

- **Round Disk Brushes:** 33
- **Round Disk Pads:** 33
- **EDGE Pads and Screens:** 33

Soap Choices 35

Standard Warranty Policy 37

Machine Install / Warranty Registration 38

SAFETY MESSAGES

You will see four kinds of safety reminders in this manual:

⚠DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury or damage to this machine or nearby objects. CAUTION also can be used to alert against unsafe practices.

NOTICE

NOTICE indicates information considered important, but not hazard-related. This safety message may be related to property damage or warranty warnings.

Your safety, and that of others, is very important. Operating this machine safely is an important responsibility.

DO NOT OPERATE THIS MACHINE:

- Unless you are trained and authorized to do so
- Unless you have read and understood this Operator's Manual
- On surfaces with greater than a 2% grade unless this machine is equipped with a functional parking brake
- On surfaces with greater than an 8% grade at any time

WHEN OPERATING THIS MACHINE:

- Remove loose objects from the floor that could be projected from the rotating Brushes
- Keep your hands and feet away from the rotating Brushes
- Do not operate this machine where flammable liquids are present
- Use caution when maneuvering

BEFORE LEAVING THE MACHINE:

- Park the machine on a level surface
- Turn the machine *OFF* (O)

BEFORE SERVICING THE MACHINE:

- Disconnect the Batteries

⚠DANGER

Explosive hydrogen gas forms when Batteries are charging. An open flame or spark can cause this gas to explode. Serious personal injury or property damage could occur. Only charge the Batteries in this machine in a well ventilated area.

⚠DANGER

Flammable materials can cause an explosion or fire. Do not use flammable materials in Tank or pick up.

⚠WARNING

The Batteries in this machine produce hazardous voltage which can cause electrical shock, burns and/or electrocution. Always disconnect Batteries before servicing this machine.

⚠WARNING

When climbing or descending ramps, always drive machine forward. To avoid overturning the machine, Do not back down ramps. Do not drive across inclines. Do not turn while ascending or descending ramps. Overturning the machine can cause serious injury or death.

⚠WARNING

Do not use water that exceeds 135°F / 57°C. If water is above said temperature, this will void the Tank Warranty.

⚠WARNING

Do not park this machine on ramps or slopes. Always park this machine on a level, hard surface. Do not operate this machine outdoors or on uneven surfaces.

⚠WARNING

The Batteries in this machine contain sulfuric acid, which causes burns to skin. If battery acid contacts clothing or skin, rinse the effected area with cold water immediately. If battery acid gets on your face or in your eyes, flush the area immediately with cold water and seek medical attention.

⚠WARNING

To avoid electrical shock, do not operate this machine over electrical floor outlets.

⚠WARNING

Dress safely. Do not wear rings or metal wrist watches when servicing this machine, as they can cause an electrical short circuit which can cause serious burns.

⚠WARNING

Do not remove, paint over or destroy warning decals. If warning decals become damaged, call 1-262-681-3583 for free replacements.

⚠WARNING

Dress safely. Do not wear a neck tie, scarf, or any loose or dangling clothing while operating this machine. Loose or dangling clothing or neck-wear can tangle in rotating parts, causing serious injury or death.

⚠WARNING

Always turn off this machine before leaving it unattended. Do not allow untrained persons to operate this machine.

⚠WARNING

NO RIDERS. Do not carry passengers on this machine. Do not use this machine as a stepladder or work platform.

⚠WARNING

Understand the dynamic braking system before you operate the machine on ramps. Machine may coast.

⚠WARNING

Before you service a Battery, always wear face protection, protective gloves and protective clothing. Battery acid or battery explosion can cause serious injuries.

⚠CAUTION

To avoid damage to this machine, use only cleaning solutions and replacement parts recommended by the manufacturer.

⚠CAUTION

Do not operate this machine if any parts have been damaged or removed.

⚠CAUTION

Always use the automatic battery charger provided by the manufacturer of this machine to charge the Batteries of this machine. It is designed to charge the Batteries at the appropriate rate. If you must use a different charger, disconnect the Batteries before charging to avoid damage to the electronic speed controller.

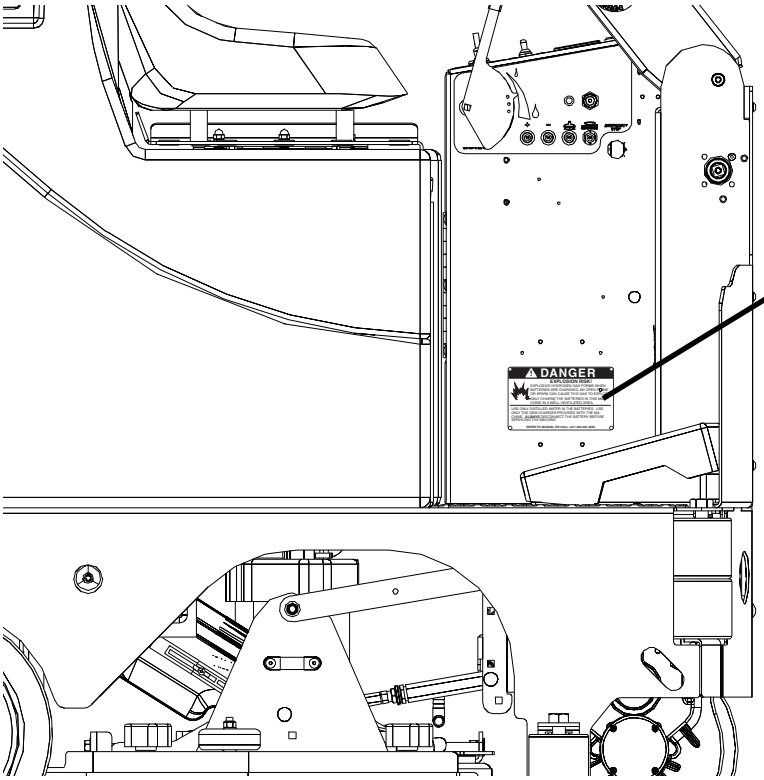
⚠CAUTION

To avoid damage to the electronic control components of this machine, Do not store this machine outdoors. Do not pressure wash this machine.

SAFETY LABEL LOCATIONS

Read and obey all Safety Labels on your RS Floor Scrubber. If you have questions about these labels, ask your supervisor.

These images indicate where on the RS Safety Labels are located. If ever the labels become illegible, worn off, or torn, promptly report it to your supervisor and replace it.



DANGER

EXPLOSION RISK!

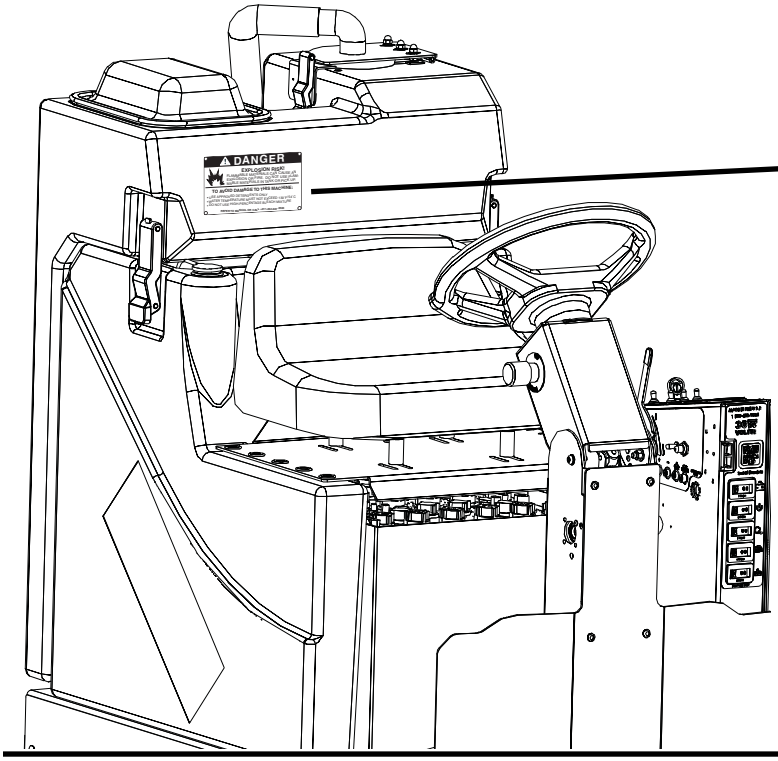
EXPLOSIVE HYDROGEN GAS FORMS WHEN BATTERIES ARE CHARGING. AN OPEN FLAME OR SPARK CAN CAUSE THIS GAS TO EXPLODE. ONLY CHARGE THE BATTERIES IN THIS MACHINE IN A WELL VENTILATED AREA.

USE ONLY DISTILLED WATER IN THE BATTERIES. USE ONLY THE OEM CHARGER PROVIDED WITH THE MACHINE. **ALWAYS** DISCONNECT THE BATTERY BEFORE SERVICING THE MACHINE.

REFER TO MANUAL OR CALL +011-262-681-3583

BATTERY CHARGING LABEL

PART #: 250-7290



DANGER

EXPLOSION RISK!

FLAMMABLE MATERIALS CAN CAUSE AN EXPLOSION OR FIRE. DO NOT USE FLAMMABLE MATERIALS IN TANK OR PICK UP.

TO AVOID DAMAGE TO THIS MACHINE:

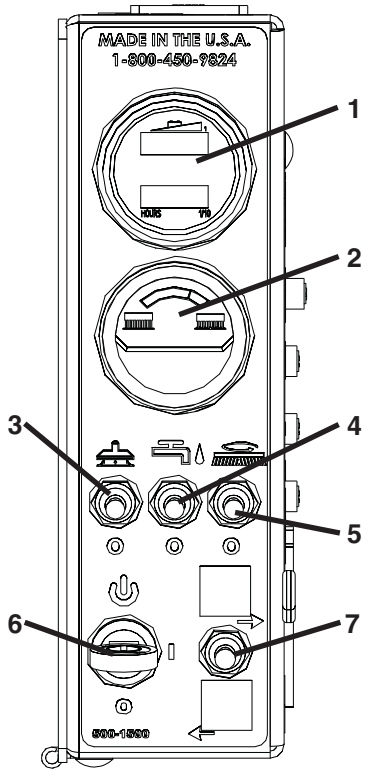
- USE APPROVED DETERGENTS ONLY
- WATER TEMPERATURE MUST NOT EXCEED 130˚F/54˚C
- DO NOT USE HIGH-PERCENTAGE BLEACH MIXTURE

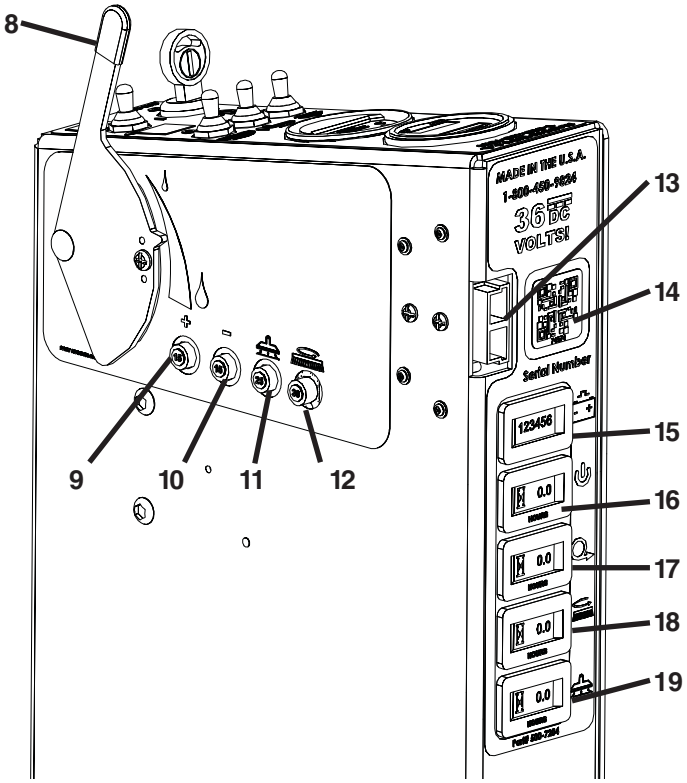
REFER TO MANUAL OR CALL +011-262-681-3583

TANK LABEL

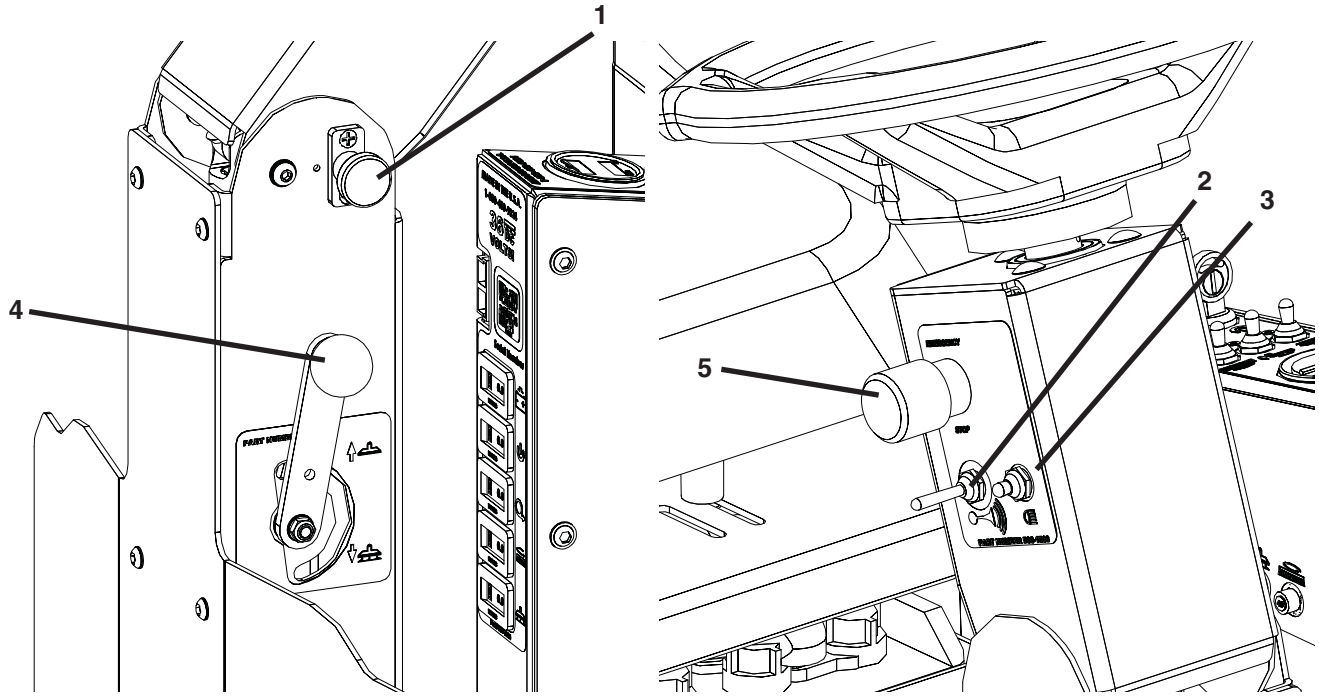
PART #: 5-728

OPERATION CONTROLS





1. **BATTERY GAUGE / HOUR METER:** Indicates the amount of battery charge remaining along with total hours used - Below 20% and machine goes into “creep” mode to save charge to allow machine to be driven back to charging station
2. **BRUSH MOTOR AMP GAUGE:** Indicates amp draw of the Scrubdeck motors combined
3. **VACUUM SWITCH [WHITE]:** Turns the Vacuum Motor *ON* (I) / *OFF* (O)
4. **SOLUTION FLOW SWITCH [BLUE]:** Turns solution flow *ON* (I)/ *OFF* (O)
5. **SCRUBDECK SWITCH [BLACK]:** Raises and lowers the Scrubdeck - Scrubdeck turns on automatically when lowered and foot pedal is pressed
6. **KEY SWITCH:** Turns power of the machine *ON* (I) / *OFF* (O)
7. **REVERSE SWITCH [RED]:** Switch to forward position to drive forward - back position for reverse (Alarm will sound in reverse)
8. **SOLUTION FLOW CONTROL LEVER:** Adjusts the amount of solution flow delivered to the Scrubdeck (+ / -)
9. **CIRCUIT BREAKER:** 15 amp Positive Bus Bar (+)
10. **CIRCUIT BREAKER:** 15 amp Negative Bus Bar (-)
11. **CIRCUIT BREAKER:** 25 amp Vacuum Motor
12. **CIRCUIT BREAKER:** 30 amp Scrubdeck Motor
13. **CHARGER PORT:** Plug in grey charger connector here to charge machine batteries (OEM 36 Volt / 25 Amp Only)
14. **QR CODE:** Scan machine serial QR Code and see all of the machines BornOn Information
15. **RECHARGE METER:** Indicates amount of times machine has been connected to a charger
16. **POWER ON METER:** Hour meter to indicate complete time key has been *ON* (I)
17. **DRIVE MOTOR METER (OPTIONAL):** Indicates complete time Drive Motor has been in use
18. **SCRUBDECK MOTOR METER (OPTIONAL):** Indicates complete time Scrub Motor(s) has been in use
19. **VACUUM MOTOR METER (OPTIONAL):** Indicates complete time Vacuum Motor has been in use



1. **ADJUSTABLE STEERING:** Four settings for operator comfort and ease of entry

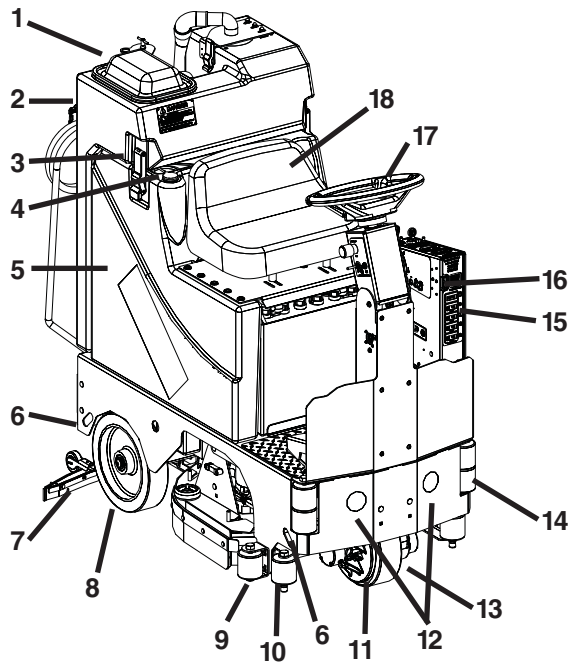
2. **HORN:** Sounds the horn for warning oncoming traffic

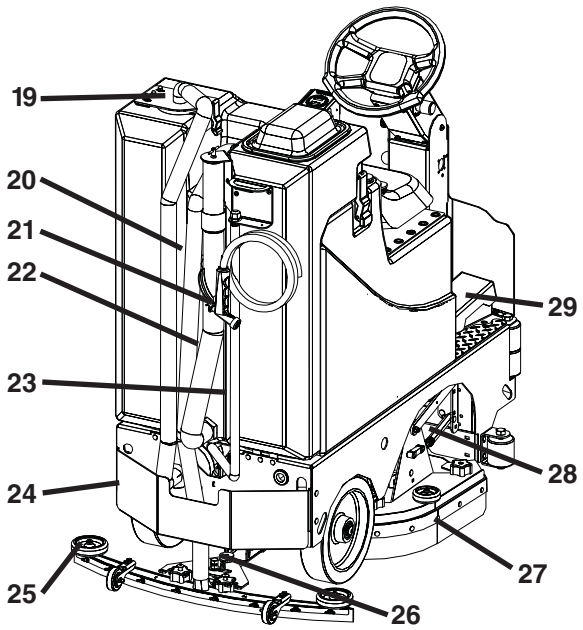
3. **HEADLIGHT SWITCH:** Turns power of the Headlight *ON* (**I**) / *OFF* (**O**)

4. **SQUEEGEE LIFT LEVER:** Raises and lowers the Squeegee

5. **EMERGENCY STOP (OPTIONAL):** Allows for complete machine shut down with 1-button push

MACHINE COMPONENTS





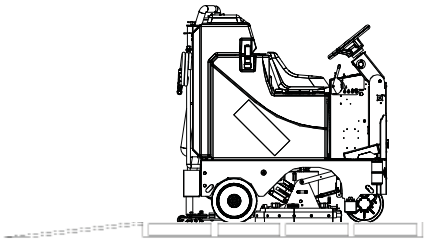
1. **DRAIN SAVER / RECOVERY TANK LID:** Easy visibility Recovery Tank Lid allows viewing of Drain Saver and Recovery Tank
2. **RECOVERY TANK:** 23 Gallon Capacity - Tip back for easy cleaning
3. **TANK LATCHES:** Permits draining of the Recovery Tank as well as access to secondary fill point and components in back of the machine
4. **SOLUTION FILL POINT:** Fill easily with hose
5. **SOLUTION TANK:** 22 Gallon Capacity
6. **TIE DOWN POINTS:** Location for tie down straps during transport (4)
7. **SQUEEGEE BLADE:** Squeegees water to be recovered by the vacuum hose
8. **REAR WHEELS:** Cut for complete water control
9. **ROLLER BRACKETS:** Designed to prevent damage to the deck (Required - Do Not Remove)
10. **LOWER FRAME ROLLER BRACKET:** Designed to prevent damage to the front of the machine (Required - Do Not Remove)
11. **FRONT DRIVE TIRE:** Drives and steers the machine
12. **LED HEADLIGHTS (OPTIONAL):** Helps you see in low light areas and to warn oncoming traffic
13. **PARKING BRAKE:** Turns the parking brake *ON* (I) */ OFF* (O) - *Never leave in the OFF* (O) *position to drive machine*
14. **POLYURETHANE ROLLERS:** Helps prevent damage to machine and objects you may drive near (Walls)
15. **METERS:** Machine Total Hour Meter & Recharge Counter are standard - Drive, Scrubdeck, and Vacuum are OPTIONAL Meters
16. **CHARGER PORT:** Plug in your console charger here (36 Volt / 25 amp ONLY)
17. **STEERING WHEEL:** Steers the main Drive Wheel
18. **SEAT:** Ergonimic seat with operator comfort in mind
19. **VACUUM FLOAT SHUT-OFF:** Automatic Vacuum Shut-off if Recovery Tank is Full
20. **VACUUM HOSE:** Main Vacuum Hose from the Squeegee to the Drain Saver
21. **SPRAY JET HOSE (OPTIONAL):** Optional Spray Jet hose allows operator to utilize the Solution Tanks cleaning solution in areas where the machine may not reach to scrub
22. **RECOVERY DRAIN HOSE:** Allows for controlled draining of the Recovery Tank
23. **SOLUTION SIGHT GAUGE & DRAIN HOSE:** Shows precise level of cleaning solution in Tank while also used as a Solution Tank drain hose
24. **REAR BUMPER:** Offers squeegee system protection from damage
25. **SQUEEGEE ROLLERS:** Helps protect the Squeegee
26. **SQUEEGEE PITCH ADJUSTMENT:** Recovers dirty water from the floor to be recovered by Vacuum Hose
27. **SIDE WIPERS:** Controls water on turns by directing it to the Squeegee
28. **ADJUSTABLE SCRUBDECK ARMS:** Ensure your Scrubdeck is level with easy adjustable arms (2 levels included)
29. **FOOTPEDAL:** Use the footpedal for drive power to the front-wheel drive

UN-CRATING MACHINE:

Carefully check the crate for any signs of damage and that the batteries are in the unit.

To un-crate the machine, remove banding strips from around the crate. Take off the top and sides and dispose properly. Remove brackets from machine wheels. Remove bolts from pallet, then remove board. Carefully roll the machine off of the base. Notify the carrier immediately if concealed damage is discovered.

CONNECTING BATTERIES:



Your machine is equipped with (3×) 12-Volt/ 175 AH WET, (3×) 12-Volt/ 225 AH WET, or (3×) 12-Volt/ 215 AH AGM Deep Cycle Batteries which form a 36 Volt system.

(SEE PICTURE BELOW OR BATTERY DISCONNECT LABEL FOR CORRECT CABLE CONNECTIONS)

1. Turn all switches to the *OFF* (O) position and remove Key.
2. Tip Seat back. Attach all Battery Cables to Terminals as shown below.
3. Turn *ON* (I) main power switch and check the Battery Charger Meter to ensure correct installation. Charge Batteries if needed **(SEE BATTERY CHARGING)**.

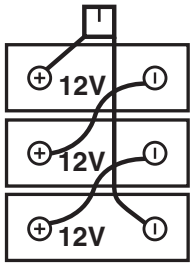
NOTICE

Batteries are a possible environmental hazard. Consult your Battery supplier for safe disposal methods.

NOTICE

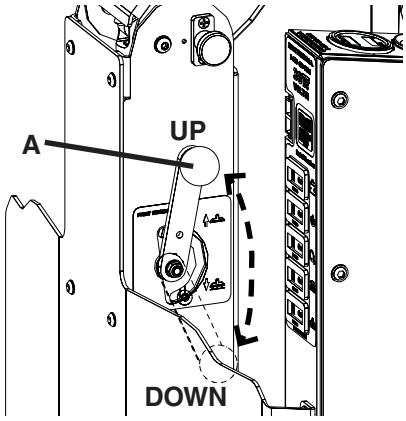
Orientation of Batteries is critical for cables to reach. Ensure proper torque values when installing batteries.
OEM Trojan - *100 in/lbs* **OEM Full River** - *90in/lbs*

36 VOLTS

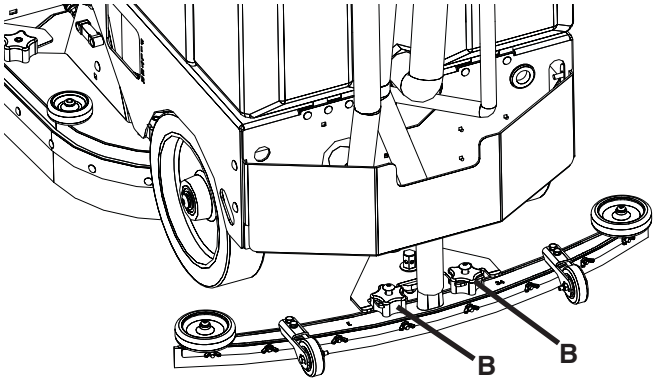


ATTACHING SQUEEGEE:

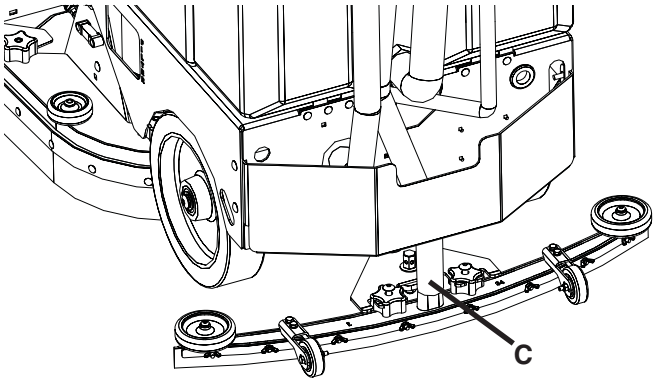
1. Turn machine *OFF* (O) and remove key.
2. Lower the Squeegee Mounting Plate by lowering the Squeegee Lift Lever ***(A)*** **(SEE BELOW)**.



3. Loosen the two knobs ***(B)*** on the Squeegee and slide them into the slots in the Squeegee Mounting Plate **(SEE BELOW)**.



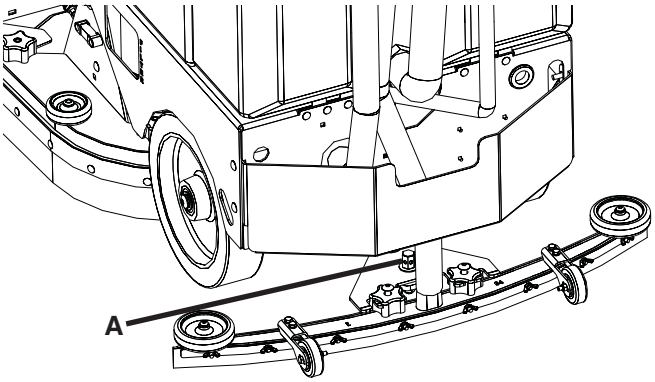
4. Tighten the two knobs and connect the Vacuum Hose ***(C)*** from the machine to the Squeegee **(SEE BELOW)**.



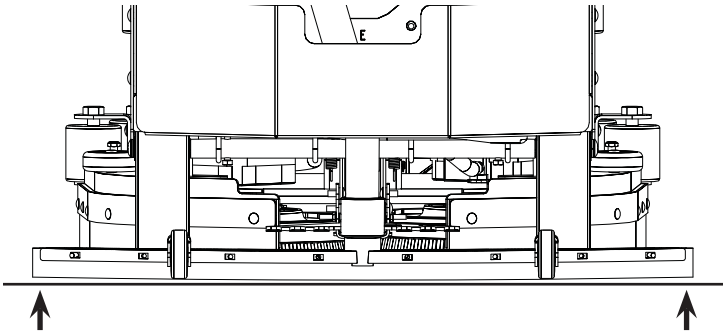
5. You may have to adjust the Squeegee Pitch **(SEE ADJUSTING SQUEEGEE ON THE NEXT PAGE)**

ADJUSTING SQUEEGEE:

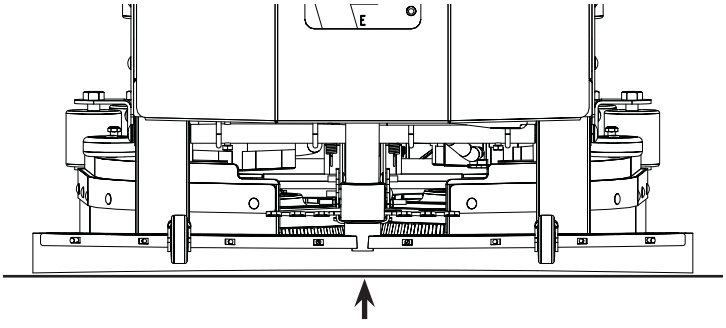
1. Turn machine *OFF* (O) and remove key.
2. Turning adjustment knob ***(A)*** clockwise *(tightening)* will lower tips and raise the center of the Squeegee **(SEE BELOW)**.



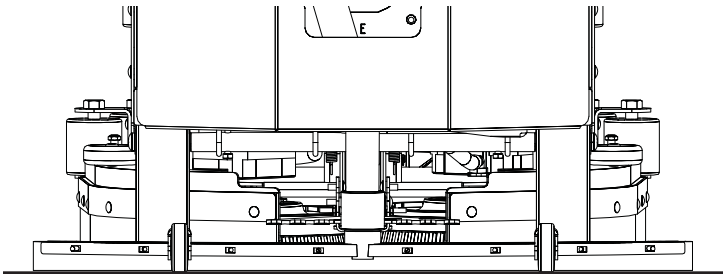
3. This Squeegee is adjusted too far back and will not pick up on the corners **(SEE BELOW)**.
   NOTE: Tips off of the floor.



4. This Squeegee is adjusted too far forward and will not pick up in the center **(SEE BELOW)**.
   NOTE: Center spaced off the floor.

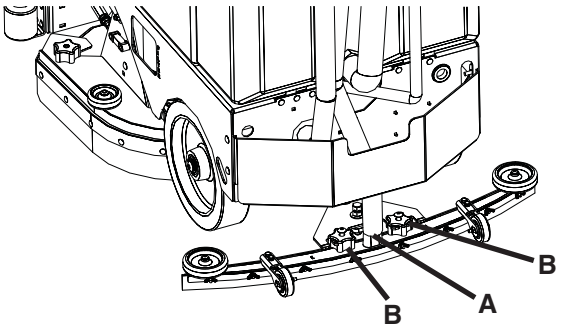


5. This Squeegee is adjusted just right with good deflection across the entire rear blade **(SEE BELOW)**.



REMOVING SQUEEGEE:

1. Turn machine *OFF* (O) and remove key.
2. Raise the Squeegee to the DOWN position by lowering the Squeegee Lift Lever.
3. Disconnect Vacuum Hose ***(A)*** from Squeegee and loosen both knobs ***(B)*** **(SEE BELOW)**.



4. Pull Squeegee assembly backward from the lifting carrier.
5. Inspect or repair as needed and reinstall.

REPLACING OR ROTATING SQUEEGEE BLADES:

NOTICE

FOR SAFETY: Before leaving or servicing the machine, stop on a level surface, turn off machine and remove key.

1. Remove the Squeegee Assembly from the machine. Remove Blade retainer strap and remove Squeegee Blade.
2. Flip the Squeegee to new edge position or replace.
3. Install Blade on the locating pins of Squeegee Assembly.
4. Install Squeegee Retainer Strap.
5. Fasten and lock knobs, starting in the center and moving outwards.

NOTICE

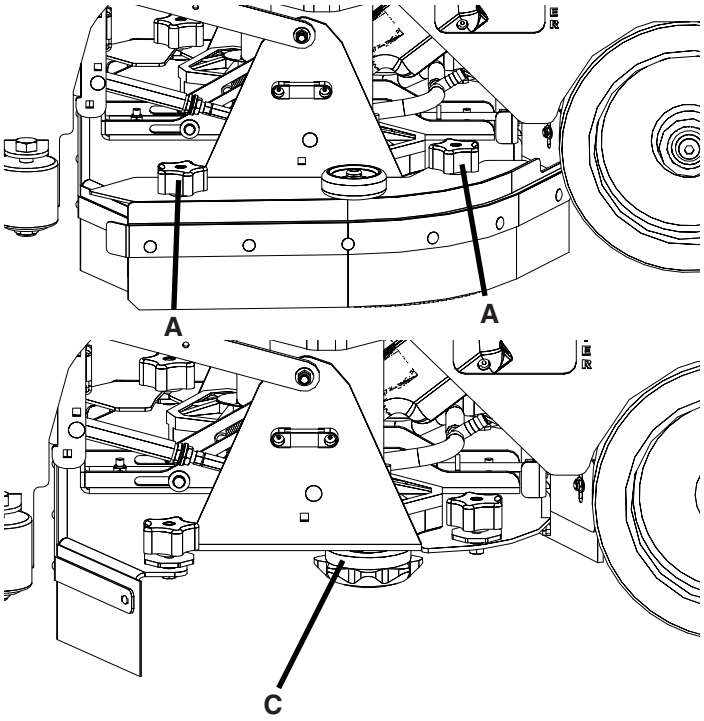
For more information on Squeegee Wipers, Materials, Sizes, and Replacement - See the **COMMON WEAR PARTS** *section of the manual in the back of the book.*

INSTALLING DISK PAD DRIVER OR BRUSH:

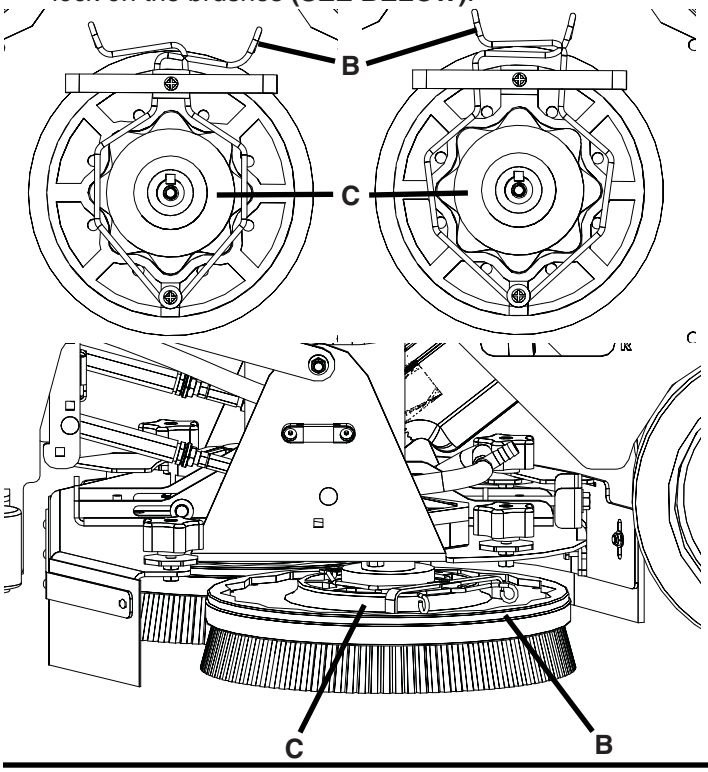
1. Turn *ON* (**I**) machine power.

2. Raise the Scrubdeck by depressing the Brush switch to the up and *OFF* (**O**) position *(Or Raise with Lever - OPTIONAL)* and turn the machine power back *OFF* (**O**). Remove Key.

3. Loosen Star Knobs ***(A)*** and remove Shrouds to access the Scrubdeck **(SEE BELOW)**.



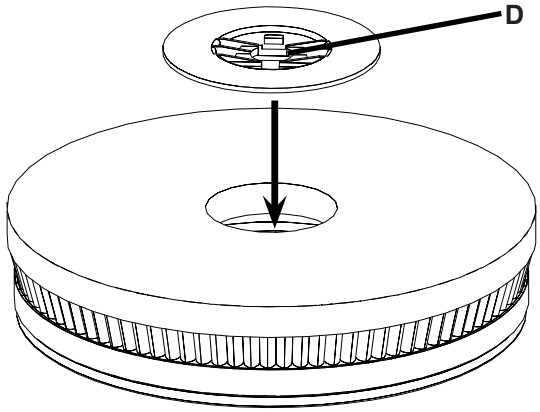
4. Attach Brushes or Pads to Motor Drives. Squeeze the scissor locking device ***(B)*** and lift brush up on to the motor drive hub ***(C)***. Make sure the scissors close and lock on the brushes **(SEE BELOW)**.



INSTALLING DRIVER PADS:

1. Select the correct Pads that best meet your cleaning application needs. Consult your local dealer for assistance.

2. Pad Installation: Attach Pads to Pad Drivers before connecting drivers to motor hub. Press down on center clip ***(D)*** till it snaps into place **(SEE BELOW)**.



NOTICE

SCRUB BRUSHES / PADS:

There are many different types of brushes available to cover applications from cleaning heavily soiled floors to polishing. A Pad Driver is also available to take advantage of the many cleaning pads on the market. Please refer to the **"Common Wear Parts"** page to assist in selecting the proper Brush / Pad for the work at hand.

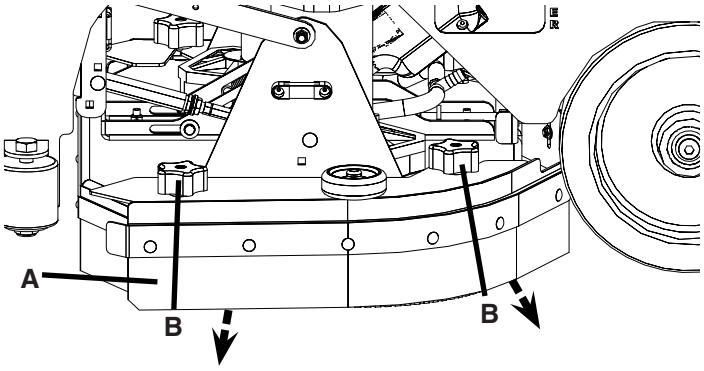
LEVELING DISK DECKS:

NOTICE

All Scrubdeck's should be level at time of machine delivery. If machine Scrubdeck is not level - Contact your Servicing Dealer.

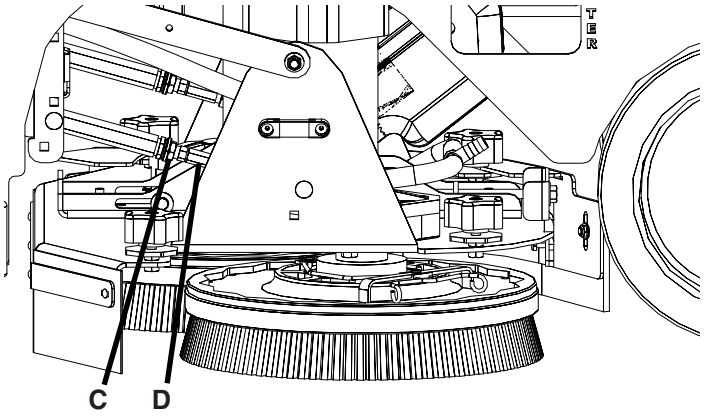
1. Drive machine to a flat level surface and turn machine *OFF* (**O**).

2. Ensure that Scrubdeck is in full upright position. Remove Shrouds ***(A)*** by loosening Star Knobs ***(B)*** and pulling away from Scrubdeck **(SEE BELOW)**.



3. Turn *ON* (**I**) machine and depress the Brush switch. Just before the Scrubdeck's drive hubs touch the ground, turn machine *OFF* (**O**). Remove key.

4. Loosen the Locking Nut ***(C)*** on the Adjustable Deck Arms. Turn the Hexagonal Arm ***(D)*** on each side of the

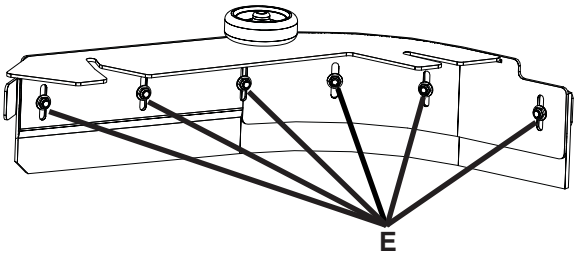


Scrubdeck to level it **(SEE BELOW)**.

5. Extending the Adjustable Arms raise the front and lowers the rear of the Scrubdeck. After Scrubdeck has been leveled *(ensure correct pitch backward - if you have)* - retighten Locking Nuts ***(C)***.

ADJUST DISK SHROUD WIPERS:

1. For Shroud rubber adjustments, loosen the Nylok Nuts ***(E)*** on the back of the Shrouds **(SEE BELOW)**.

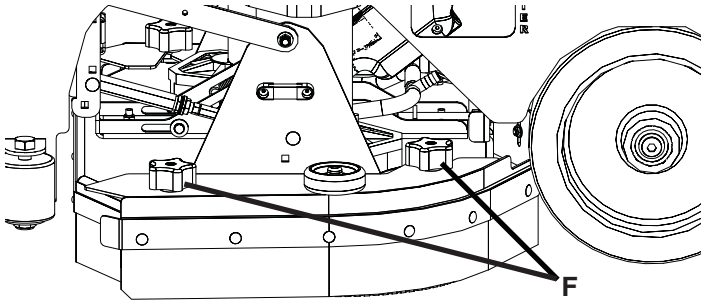


2. To adjust rubber to the desired height, just slide the curtain up or down in the slits and tighten screws.

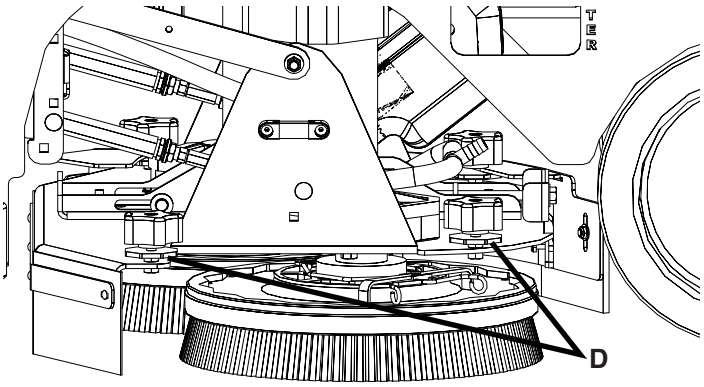
3. Reattach the Shroud to the Scrubdeck by sliding back on and tightening the Star Knobs.

ADJUST DISK SHROUDS:

1. For Shroud adjustments, loosen the Start Knobs ***(F)*** and remove Shroud **(SEE BELOW)**.



2. Spin the Red Shroud Adjustment Knobs ***(G)*** up or down on the Shroud Support Bolt **(SEE BELOW)**.



3. Once adjusted to the proper height, tighten shrouds back in place.

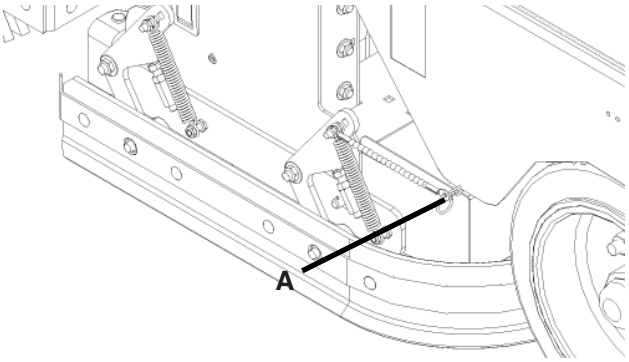
INSTALLING CYLINDRICAL BRUSH:

1. Turn *ON* (I) machine power.
2. Raise the Scrubdeck by depressing the Brush switch to the up and *OFF* (O) position *(Or Raise with Lever - OPTIONAL)* and turn the machine power back *OFF* (O). Remove Key.

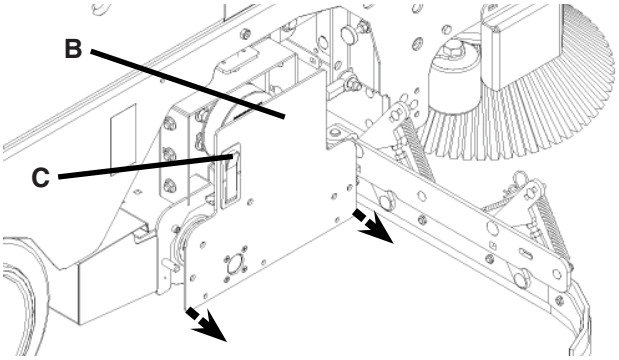
⚠CAUTION

Disconnect the batteries.

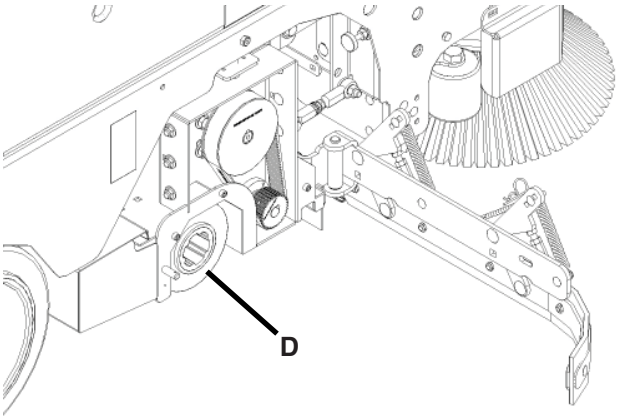
3. Remove Side Wiper pin ***(A)*** and open the Wipers outward to allow access to the Cylindrical Door ***(B)*** **(SEE BELOW)**.



4. Press Side Door Latch ***(C)*** and pull door off of Scrubdeck to allow access to the brushes **(SEE BELOW)**.



5. Slide Brush ***(D)*** into Brush area and engage onto the Brush Driver on the opposite side **(SEE BELOW)**.

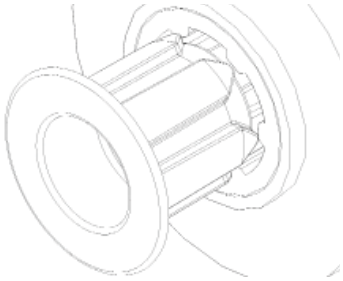


6. With Brushes engaged, re-attach the Side Door as well as the Side Wipers.

NOTICE

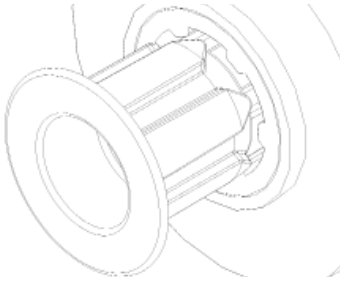
If the Brushes are not fully engaged with the Drivers, the Brushes will be damaged. Do **NOT** force the access door back on. This usually indicates improper Brush installation.

7. Brush drivers shown misaligned **(SEE BELOW)**.



NEW STYLE DRIVER

8. Brush driver shown properly aligned **(SEE BELOW)**.



NEW STYLE DRIVER

LEVELING CYLINDRICAL DECKS:

NOTICE

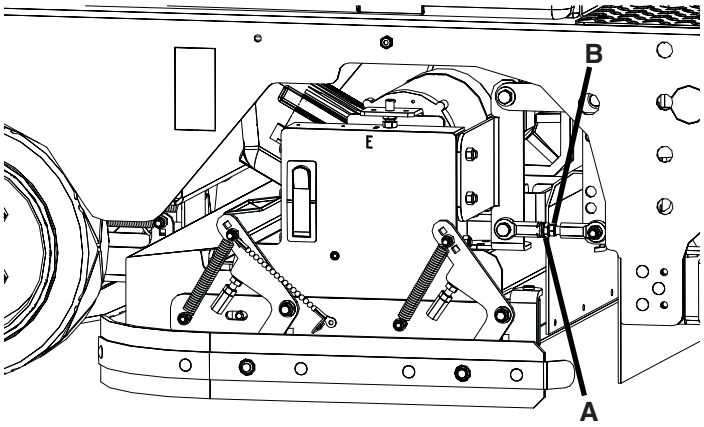
All Scrubdeck's should be level at time of machine delivery. If machine Scrubdeck is not level - Contact your Servicing Dealer.

1. Drive machine to a flat level surface and turn machine *OFF* (**O**).

2. Ensure that Scrubdeck is in full upright position and remove brushes.

3. Turn *ON* (**I**) machine and depress the Brush switch. Just before the Scrubdeck touches the ground, turn machine *OFF* (**O**).

4. Loosen the Locking Nut ***(A)*** on the Adjustable Deck Arms. Turn the Hexagonal Arm ***(B)*** on each side of the Scrubdeck to level it. Use the levels built into the deck **(SEE BELOW)**.



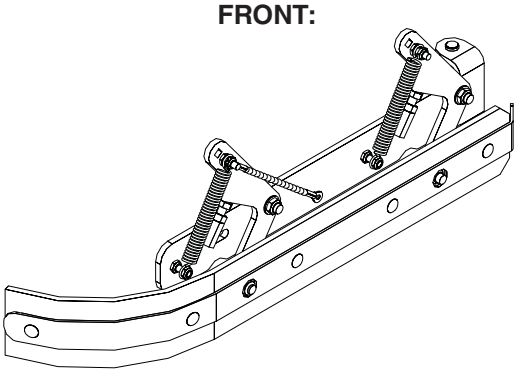
5. Extending the Adjustable Arms raise the front and lowers the rear of the Scrubdeck. After Scrubdeck has been leveled - retighten Locking Nuts ***(A)***.

ADJUST CYLINDRICAL WIPERS BLADES:

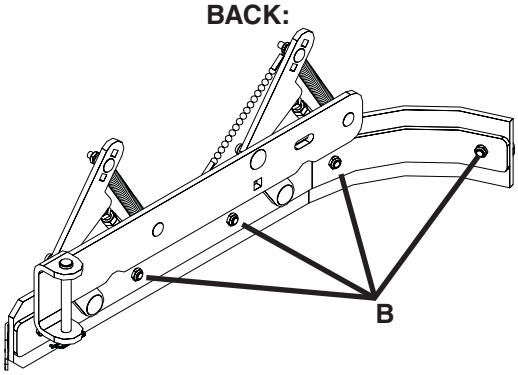
1. For Cylindrical side Wipers, open wipers by releasing the pin. Loosen Wiper band screws ***(B)*** **(SEE BELOW)**.

2. To adjust Wiper to the desired height, just slide the Wiper up or down in the slots and tighten the screws.

FRONT:

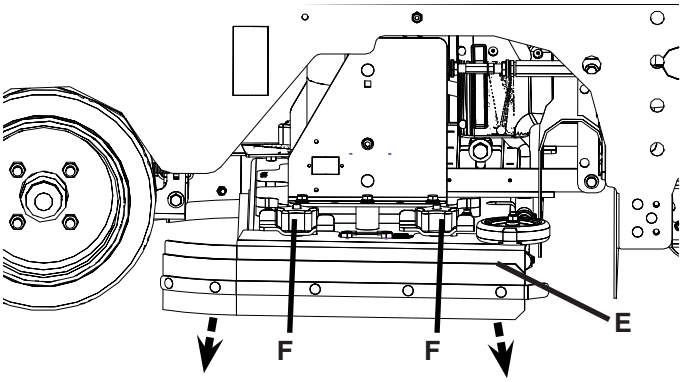


BACK:

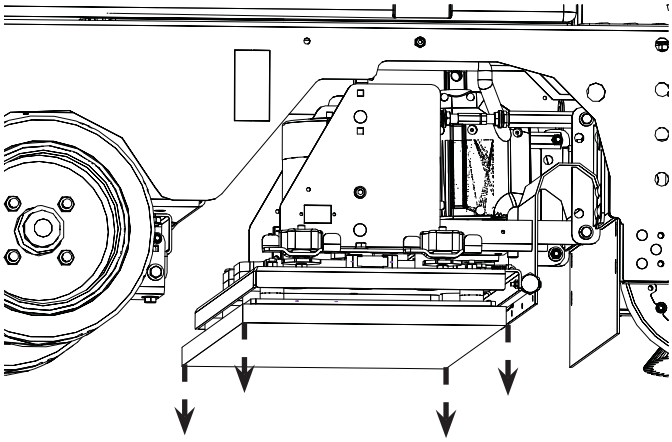


INSTALLING EDGE PADS:

1. Turn *ON* (I) machine power.
2. Raise the Scrubdeck by depressing the Brush switch to the UP and *OFF* (O) position and turn machine power back *OFF* (O). Remove Key.
3. Select the correct Pads that best meet your cleaning application. Consult your local dealer for assistance.
4. Remove the EDGE Scrubdeck Shrouds ***(E)*** by turning the Rubber Star knobs ***(F)*** and sliding the shroud off **(SEE BELOW)**.



5. Remove any Pad previously attached to the EDGE Grip Face by pulling down from the corners **(SEE BELOW)**.



6. Once Grip Face is clear of any Pads, place pad wanted for application centered on the Grip Face *(This will leave a ½" overhang on all sides)*.
7. Press upwards on the Pad to secure it in place **(SEE ABOVE)**.
8. With Pad attached securely to Grip Face of EDGE Deck, the machine is ready to use.

NOTICE

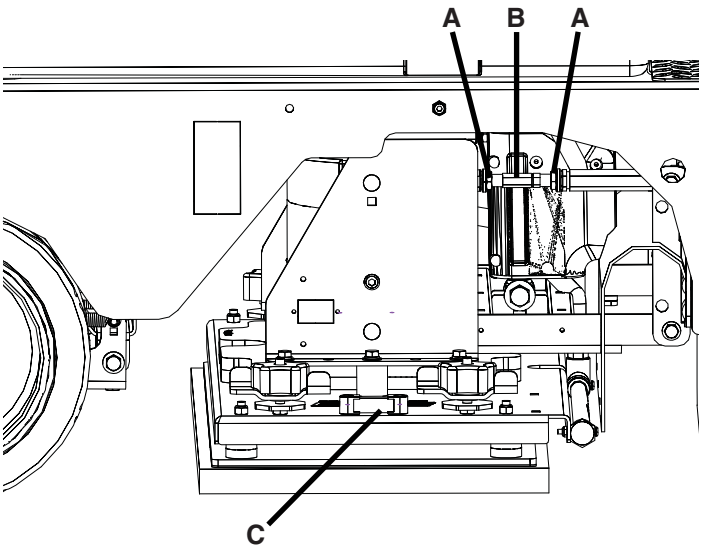
NEVER place aggressive Pads (Maroon Prep, Dominator HD Strip, etc.) directly onto the Grip Face. Always use Red or Blue Spacer pad to prevent Grip Face damage.

LEVELING EDGE DECKS:

NOTICE

All Scrubdeck's should be level at time of machine delivery. If machine Scrubdeck is not level - Contact your Servicing Dealer.

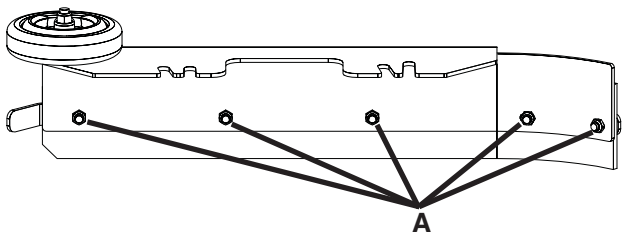
1. Drive machine to a flat level surface and turn machine *OFF* (O).
2. Ensure that Scrubdeck is in full upright position.
3. Turn *ON* (I) machine and depress the brush switch. Just before the Scrubdeck's EDGE Pad touches the ground, turn machine *OFF* (O). Remove key.
4. Loosen the Locking Nut ***(A)*** on the Adjustable Deck Arms. Turn the Hexagonal Arm ***(B)*** on each side of the Scrubdeck to level it. Use the Scrubdeck Levels ***(C)*** built into the deck **(SEE BELOW)**.



5. Extending the Adjustable Arms raise the front and lowers the rear of the Scrubdeck. After Scrubdeck has been leveled - tighten Locking Nuts ***(A)***.

ADJUST EDGE SHROUD WIPERS:

1. For Shroud rubber adjustments, loosen the Nylok Nuts ***(A)*** on the back of the Shrouds **(SEE BELOW)**.

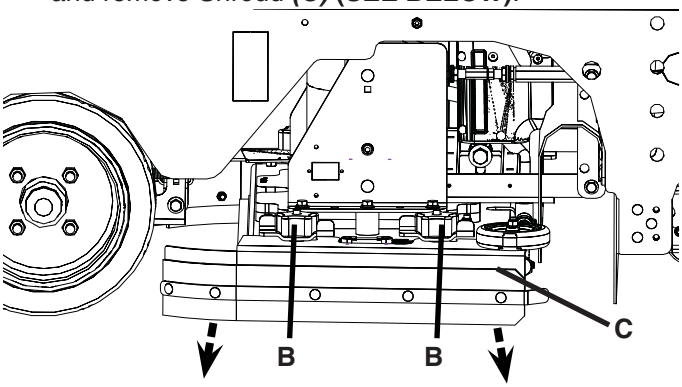


2. To adjust rubber to the desired height, just slide the curtain up or down in the slits and tighten screws.

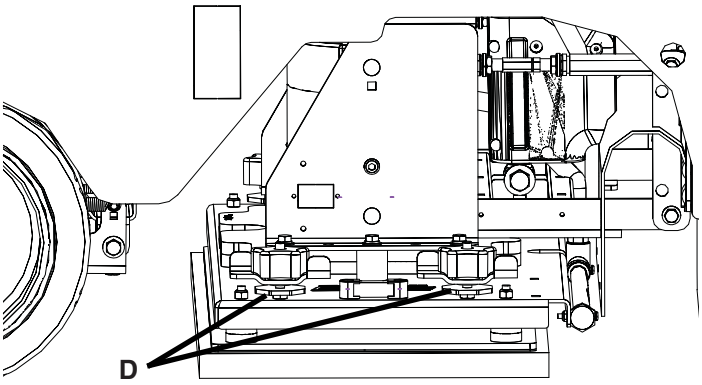
3. Reattach the Shroud to the Scrubdeck by sliding back on and tightening the Star Knobs.

ADJUST EDGE SHROUDS:

1. For Shroud adjustments, loosen the Start Knobs ***(B)*** and remove Shroud ***(C)*** **(SEE BELOW)**.



2. Spin the Red Shroud Adjustment Knobs ***(D)*** up or down on the Shroud Support Bolt **(SEE BELOW)**.

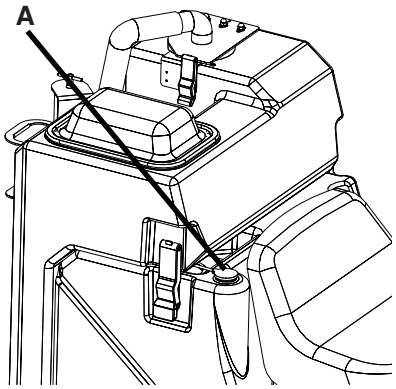


3. Once adjusted to the proper height, tighten Shrouds ***(C)*** back in place.

PRE-CLEANING CHECKLIST:

Read and understand the complete Operator's Manual before operating the machine along with filling out and sending in a Machine Installation Form.

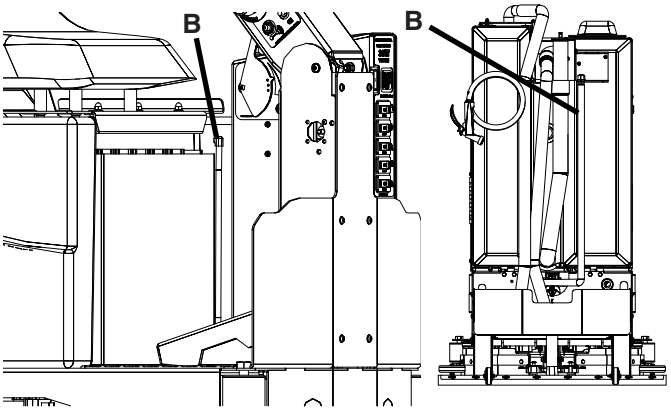
1. Check Battery Gauge on the Control Panel. Make sure Batteries are fully charged before using.
2. Check the condition of the Pads or Brushes.
3. Check the condition of the Squeegee Blades.
4. Raise the Scrubdeck and Squeegee before transporting then transport the machine to the filling station.
5. Turn the machine *OFF* (O). Remove key.
6. Fill the Tank with up to 23 gallons of clean water either at the fill port ***(A)*** **(SEE BELOW)**.



7. Add **APPROVED** cleaning chemical to the Tank. Use the proper dilution ratio indicated on the bottle. Contact us at 1(800)-634-4060 or +001-262-681-3583 if unsure.

NOTICE

The clear tube *(Solution Sight Tube)* ***(B)*** at the front and rear of the machine indicates the amount of water in the Tank **(SEE BELOW)**.



⚠DANGER

EXPLOSION RISK! Flammable materials can cause an explosion or fire. Do NOT use flammable materials in Tank or pick up.

⚠CAUTION

TO AVOID DAMAGE TO THIS MACHINE:

- Use APPROVED detergents only
- Water temperature must not exceed 130˚F/54˚C
- Do NOT use high-percentage Bleach mixture

OPERATING HINTS:

1. Observe the amount of solution the machine is dispensing on the floor and adjust to the desired flow. To increase the solution flow rate, press the Solution Control Lever forward. To shut the solution *OFF* (O) completely, just release the Foot Pedal, or use dash mounted solution switch *ON* (I) / *OFF* (O).
2. Keep an eye on the clear Vacuum cover to make sure that there is not any foamy buildup in the Recovery Tank. If excess foam begins to develop, stop and drain tank and pour a recommended foam control solution into the Recovery Tank. Foam is usually an indication of excessive soap.
3. Always operate on flat, solid surfaces at lower speeds when scrubbing around walls and objects. You should reduce the speed to maintain control when turning. Don't operate on ramps or incline.
4. If Squeegee starts to streak, raise and wipe the Blades with a clean cloth. If the problem continues, check the Squeegee Hose for clogs and the Squeegee Blades for wear or damage and rotate if needed. You may need to pre-sweep before scrubbing. **(Only Use OEM Parts)**
5. Change or turn over Brushes / Pads when dirty.
6. Stay clear of objects protruding from the floor such as sockets, grates, etc, for they will damage the Brushes / Pads and Squeegee Blades.
7. Always keep an eye on your gauges. They let you know the status of a particular system at a glance. If your battery gauge is reading low you must stop immediately and recharge. Running the Batteries dead will result in permanent damage to the Batteries.
8. When you run out of solution, raise the Scrubdeck and continue to Vacuum the remaining water until it is all consumed. The Solution Sight Tube is used to indicate the level of detergent remaining in the Tank.
9. When you are ready to stop, raise the Scrubdeck, turn *OFF* (O) the solution switch, raise the Squeegee and drive the machine back to the charging area. Be sure to drain both Tanks before storing the machine and store with key removed and seat in the up position.

ONE PASS SCRUBBING:

1. Turn *ON* (I) machine Key Switch ***(A)***.
2. Ensure machine is fully charged before operation by checking the Battery Gauge ***(B)***.
3. Lower the Squeegee by manually lowering the the Squeegee Lever ***(C)***.
4. Turn *ON* (I) the Squeegee Vacuum by pressing the Vacuum Motor Switch [Black] ***(D)***.
5. Lower Scrubdeck head to the floor by pressing the Scrubdeck Toggle Switch [Yellow] forward on the Control Panel ***(E)***.
6. Press the Solution Flow Switch [Blue] ***(F)*** to turn *ON* (I) solution flow. Use the Flow Lever to regulate ***(J)***.
7. Begin scrubbing by depressing the Foot Pedal ***(G)*** slowly and then to the speed required.
8. Once the machine begins to move, watch the Brush Amp Gauge ***(H)*** to ensure no circuits are tripped. Operate in Green.
9. To operate the machine in reverse, simply switch the Reverse switch [Red] ***(I)*** back towards the rear of the machine. The reverse speed is set to approximately 50% of the forward speed.
10. To stop the machine, release the Foot Pedal and the machine will stop automatically ***(G)***.

SCRUB ONLY:

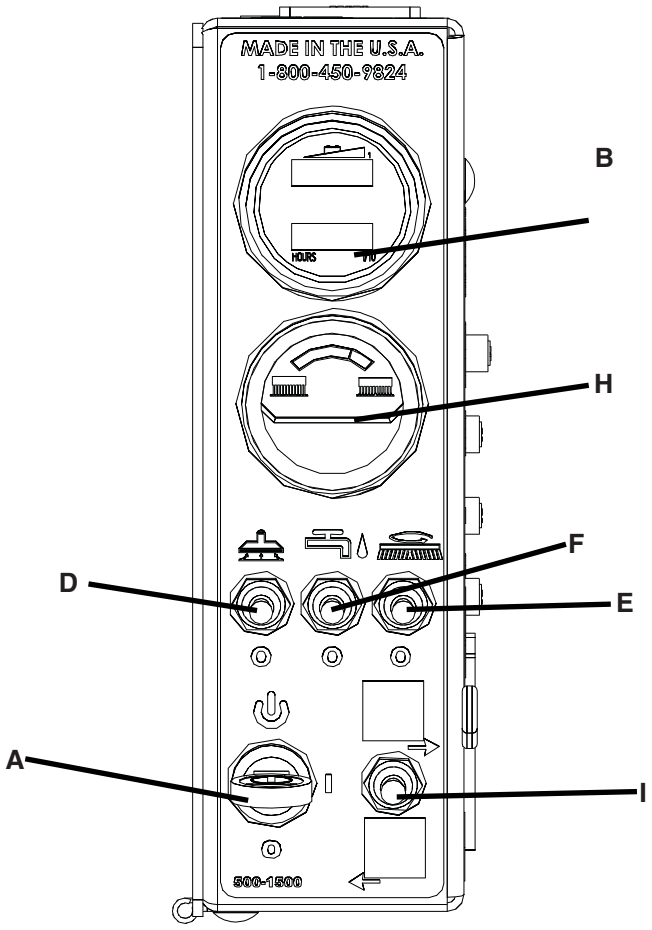
1. Turn *ON* (I) machine Key Switch ***(A)***.
2. Ensure machine is fully charged before operation by checking the Battery Gauge ***(B)***.
3. Lower Scrubdeck head to the floor by pressing the Scrubdeck Toggle Switch [Yellow forward on the Control Panel ***(E)***.
4. Press the Solution Flow Switch [Blue] ***(F)*** to turn on solution flow. Use the Flow Lever to regulate ***(J)***.
5. Begin scrubbing by depressing the Foot Pedal ***(G)*** slowly and then to the speed required.
6. Once the machine begins to move, watch the Brush Amp Gauge ***(H)*** to ensure no circuits are tripped. Operate in Green.
7. To stop the machine, release the Foot Pedal and the machine will stop automatically ***(G)***.

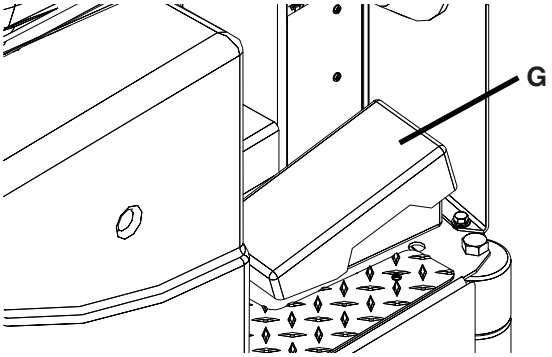
VACUUM ONLY:

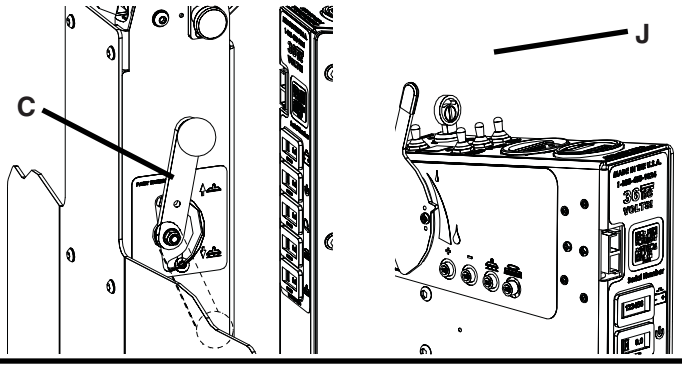
1. Turn *ON* (I) machine Key Switch ***(A)***.
2. Ensure machine is fully charged before operation by checking the Battery Gauge ***(B)***.
3. Lower the Squeegee by manually lowering the the Squeegee Lever ***(C)***.
4. Turn on the Squeegee Vacuum by pressing the Vacuum Motor Switch [Yellow] ***(D)***.
5. Begin squeegeeing by depressing the Foot Pedal ***(G)*** slowly and then to the speed required.
6. To stop the machine, release the Foot Pedal and the machine will stop automatically ***(G)***.

ADJUST SOLUTION FLOW:

1. Push forward on the Solution Flow Lever ***(J)*** to increase the solution flow and pull backwards on the toggle to decrease solution flow **(SEE BELOW)**.



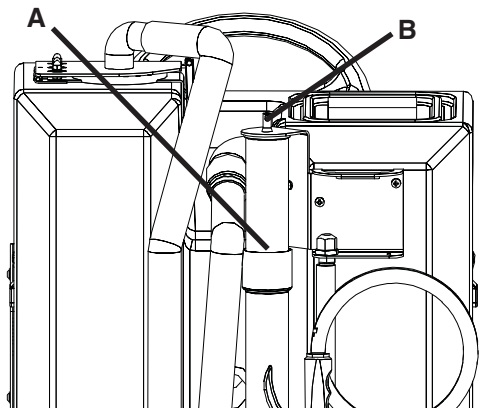




DRAINING RECOVERY TANK:

Always empty Recovery Tank after every shift and when refilling the Solution Tank. You can refill the Solution Tank while the Recovery Tank is draining.

1. To drain the Recovery Tank remove Drain Hose ***(A)*** by loosening the Recovery Hose Expansion Plug ***(B)*** at the rear of the Tank **(SEE BELOW)**.



NOTICE

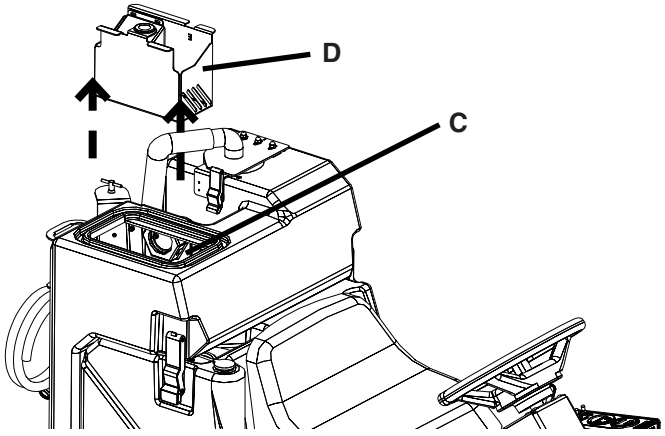
Leave Drain Saver Lid open while draining Tanks. Rinse thoroughly. Keep Drain Saver Lid open while Charging.

NOTICE

Get Supervisor APPROVAL first and drain at APPROVED locations only. NEVER off loading docks, elecated platforms, or stormdrains.

FLUSH RECOVERY TANK:

1. Rinse the Recovery Tank after every use ***(C)***. Remove Tank Lid and pull out the Drain Saver Basket [Yellow] ***(D)*** for access. This will prevent heavy build-up on the bottom of the tank, foul odors as well as



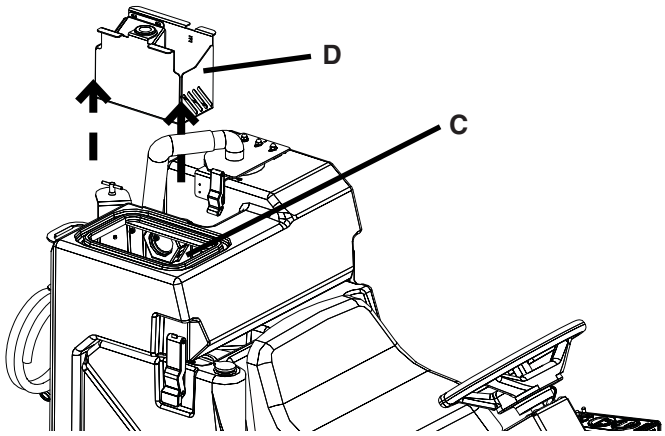
clogging of your floor drains **(SEE BELOW)**.

2. Remove Drain Hose ***(A)*** and open to allow for drainage of the Recovery Tank **(SEE ABOVE)**.
3. Flush Recovery Tank with water hose.
4. After rinsing, reattach the Drain Hose ***(A)*** **(SEE ABOVE)**.

NOTICE

Keep water off of Control Panel.

CLEAN "DRAIN SAVER":

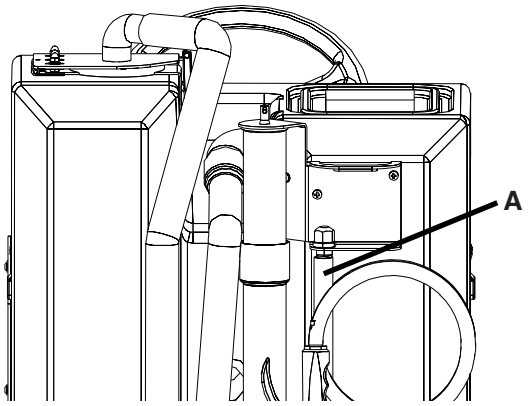


With Recovery Lid open and Tank fully drained:

1. Remove Drain Saver Basket ***(D)*** from machine Recovery Tank ***(E)*** **(SEE BELOW)**.

2. Rinse Basket with fresh water from the outside while holding upside down. This will allow for better cleaning.

3. Replace the Drain Saver Basket ***(D)*** into the Recovery Tank ***(C)***.



DRAINING SOLUTION TANK:

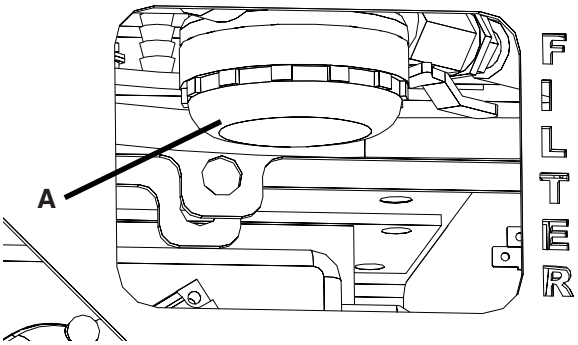
To drain unwanted cleaning solution from the Solution Tank, perform the following steps:
(SEE BELOW)

1. Pull the clear Sight Tube/Drain Hose ***(A)*** off barbed fitting.

2. Rinse out Tank and solution flow system with clean water.

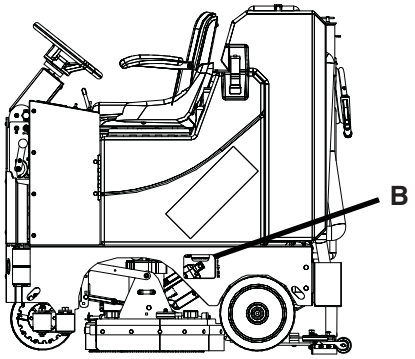
SOLUTION FILTER:

The solution system has an “Inline Filter” ***(A)*** to filter out cleaning solution prior to scrubbing **(SEE BELOW)**.

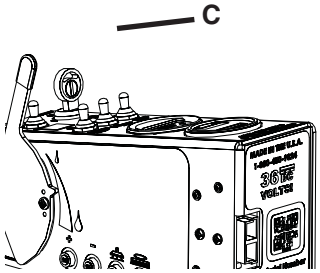


CLEANING SOLUTION FILTER:

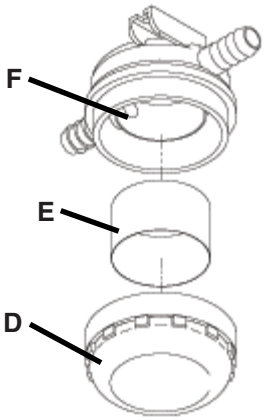
1. To clean the Solution Filter, find Filter Access on machine Frame ***(B)*** **(SEE BELOW)**.



2. Turn *OFF* Shut-Off Valve with Solution Lever ***(C)*** on the Central Command **(SEE BELOW)**.



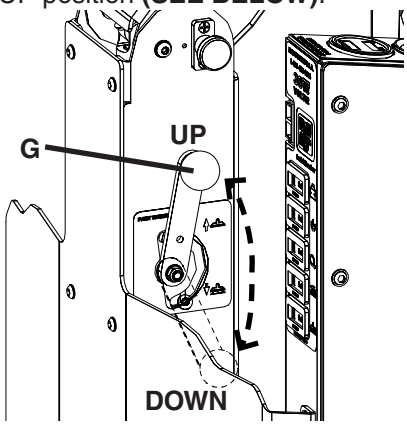
3. Unscrew the clear cap ***(D)*** from house ***(E)*** and remove the stainless steel screen ***(F)*** **(SEE BELOW)**.



4. Rinse any debris from the screen with clean water.
5. Reinstall screen and screw cap back on tightly and open the water valve by increasing solution flow.

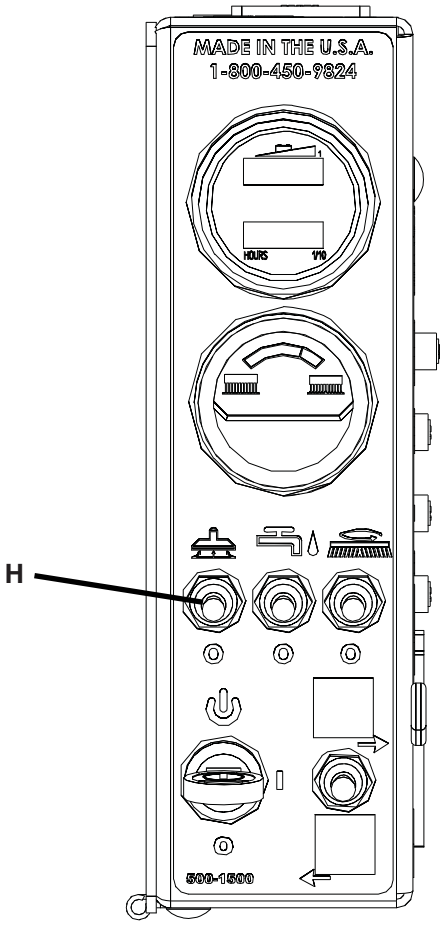
SQUEEGEE UP:

1. To raise the Squeegee off the floor, manually raise the Squeegee Lift Lever ***(G)*** to the UP position **(SEE BELOW)**.



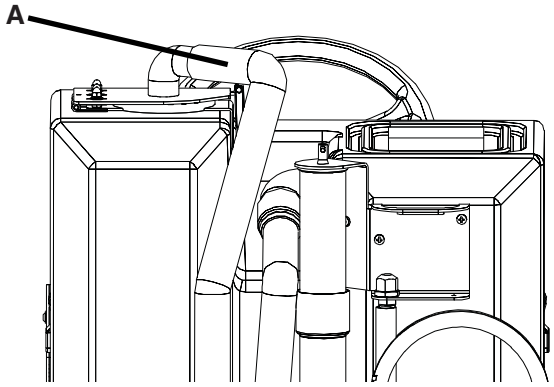
SQUEEGEE DOWN:

1. To lower the Squeegee to the floor, manually lower the Squeegee Lift Lever ***(G)*** to the downward position **(SEE ABOVE)**. Use the Vacuum Switch ***(H)*** to turn the Vacuum Motor for the Squeegee *ON* **(SEE BELOW)**.

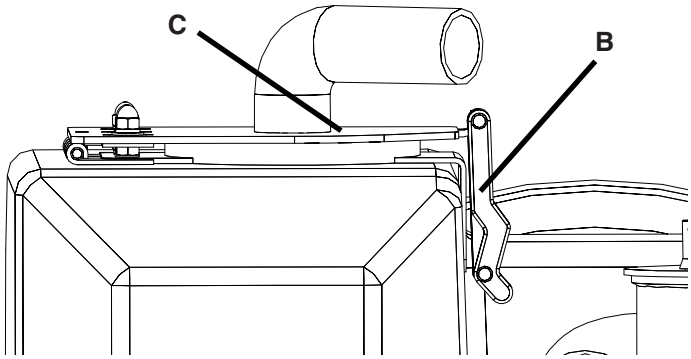


CLEAN VACUUM SCREEN:

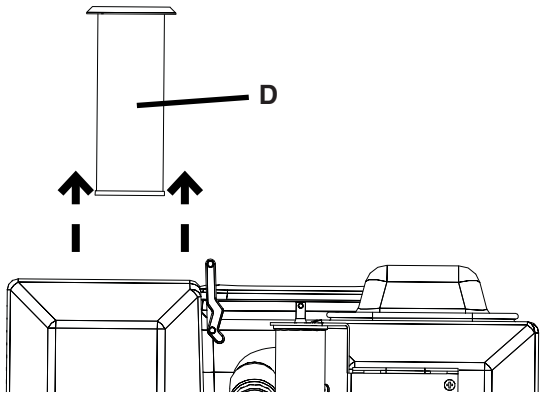
1. Remove Vacuum Hose from Vacuum Screen Output ***(A)*** **(SEE BELOW)**.



2. Release Vacuum Screen Latch ***(B)*** **(SEE BELOW)** and open Access Door ***(C)*** **(SEE BELOW)**.



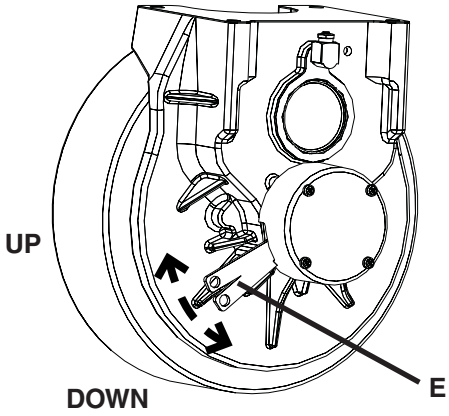
3. Pull Vacuum Screen and float ball assembly ***(D)*** out of the Recovery Tank **(SEE BELOW)**.



4. Rinse with hot water.
5. Dry thoroughly.
6. Replace the Vacuum Screen into Recovery Tank.
7. Shut Vac Screen Door and Latch.

RELEASING PARKING BRAKE OVERRIDE LEVER:

To release the Parking Brake, move the Parking Brake Override Lever ***(E)*** to the *UP* position. To return back to Override Mode - slide to the *DOWN* position.



Charger Specifications

- Output voltage of 36 Volts
- Output current of 25 amps max *(Optional)*
- Input voltage of 110 Volts/ 60 Hz *(220V/50 Hz available)*
- Automatic shut off circuit
- Made for Deep Cycle Batteries

⚠DANGER

Explosive hydrogen gas forms when Batteries are charging. An open flame or spark can cause this gas to explode. Serious personal injury or property damage could occur. Only charge the Batteries in this machine in a well ventilated area.

⚠WARNING

Before you service a Battery, always wear face protection, protective gloves and protective clothing. Battery acid or battery explosion can cause serious injuries.

⚠WARNING

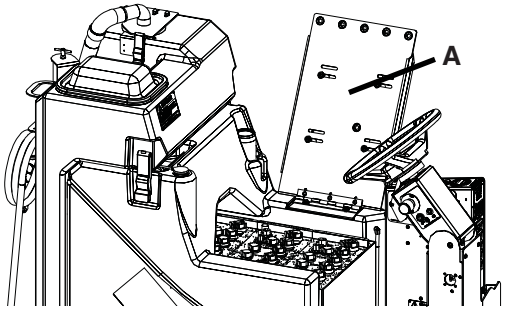
The Batteries in this machine contain sulfuric acid, which causes burns to skin. If battery acid contacts clothing or skin, rinse the effected area with cold water immediately. If battery acid gets on your face or in your eyes, flush the area immediately with cold water and seek medical attention.

⚠CAUTION

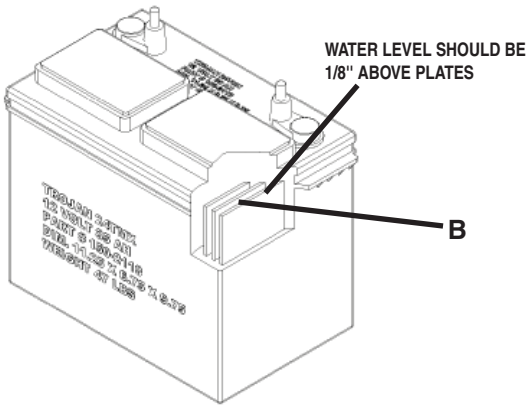
Always use the automatic battery charger provided by the manufacturer of this machine to charge the Batteries of this machine. It is designed to charge the Batteries at the appropriate rate. If you must use a different charger, disconnect the Batteries before charging to avoid damage to the electronic speed controller.

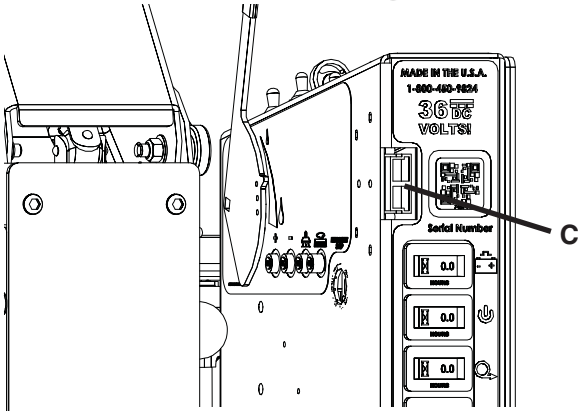
EXTERNAL BATTERY CHARGING:

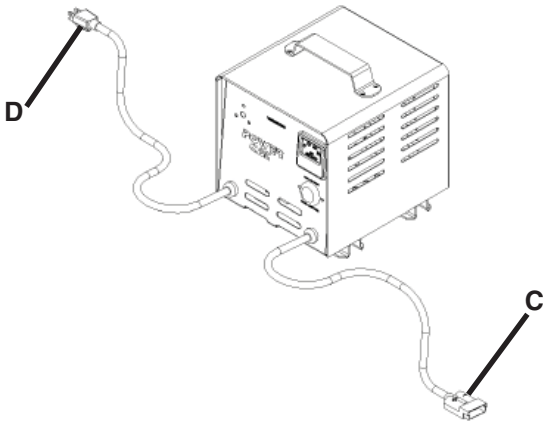
1. Transport machine to a well ventilated area for charging.
2. Turn the machine *OFF* (O). Remove key. Tip Seat ***(A)*** to side for Battery Access **(SEE BELOW)**.



3. Check the water in each Battery ***(B)*** **(SEE BELOW)**. Do not charge the machine unless the water is slightly higher than the plates. If needed, add enough distilled water to just slightly cover the plates. Be careful not to over fill. Batteries can overflow during charging. Replace caps before charging.
4. First, plug the (grey 50) Charger plug into the machine's Charger Port ***(C)*** **(SEE BELOW)**. After the Charger plug is connected, plug the charger power cord into a grounded 110 Volt / 60 hz standard wall outlet ***(D)*** **(SEE BELOW)**. Ensure to leave the seat lid open while charging.
5. The Charger will begin charging and shut off when fully charged *(check Charger Amp gauge).*
6. After the Charger has turned off - First, unplug the Charger from the wall outlet. Second, unplug the grey 50 Charger plug from the machine.
7. Recheck the cell level after charging. If needed, add distilled water up to the correct level. Be certain to replace the caps securely and to wipe off the top of the Batteries with a clean cloth.







Charger Specifications

- Output voltage of 36 Volts
- Output current of 25 amps max
- Input voltage of 110 Volts/ 60 Hz *(220V/50 Hz available)*
- Automatic shut off circuit
- Made for Deep Cycle Batteries

⚠DANGER

Explosive hydrogen gas forms when Batteries are charging. An open flame or spark can cause this gas to explode. Serious personal injury or property damage could occur. Only charge the Batteries in this machine in a well ventilated area.

⚠WARNING

Before you service a Battery, always wear face protection, protective gloves and protective clothing. Battery acid or battery explosion can cause serious injuries.

⚠WARNING

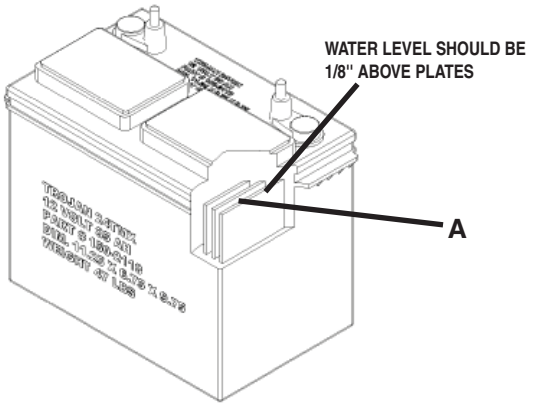
The Batteries in this machine contain sulfuric acid, which causes burns to skin. If battery acid contacts clothing or skin, rinse the effected area with cold water immediately. If battery acid gets on your face or in your eyes, flush the area immediately with cold water and seek medical attention.

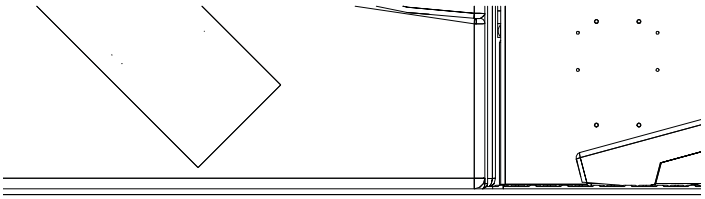
⚠CAUTION

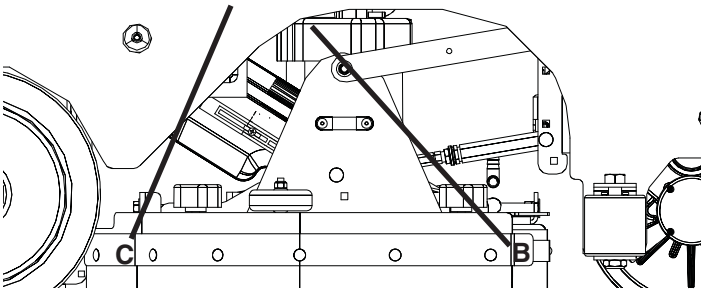
Always use the automatic battery charger provided by the manufacturer of this machine to charge the Batteries of this machine. It is designed to charge the Batteries at the appropriate rate. If you must use a different charger, disconnect the Batteries before charging to avoid damage to the electronic speed controller.

ON-BOARD BATTERY CHARGING (OPTIONAL):

1. Transport machine to a well ventilated area for charging.
2. Turn the machine *OFF* (O). Remove key. Tip Seat Access to the side.
3. Check the water in each Battery ***(A)***. Do not charge the machine unless the water is slightly higher than the plates. If needed, add enough distilled water to just slightly cover the plates. Be careful not to over fill. Batteries can overflow during charging. Replace caps before charging.
4. Plug the Charger power cord into a grounded standard wall outlet ***(B)***.
5. The green Indicator Light ***(C)*** will come on and the Charger will automatically begin charging. When finished, the Charger will automatically shut off as well as the green indicator light *(check Battery gauge)*.
6. After the Charger has turned off, unplug the Charger from the wall outlet.
7. Recheck the cell level after charging. If needed, add distilled water up to the correct level. Be certain to replace the caps securely and to wipe off the top of the Batteries with a clean cloth.







DESCRIPTION OF LED

Red LED: Battery level low
Yellow LED: Battery at ½ charge
Green LED: Battery fully charged

SAFETY:

⚠DANGER

Explosive hydrogen gas forms when Batteries are charging. An open flame or spark can cause this gas to explode. Serious personal injury or property damage could occur. Only charge the Batteries in this machine in a well ventilated area.

⚠WARNING

Before you service a Battery, always wear face protection, protective gloves and protective clothing. Battery acid or battery explosion can cause serious injuries.

⚠WARNING

The Batteries in this machine produce hazardous voltage which can cause electrical shock, burns and/or electrocution. Always disconnect Batteries before servicing this machine.

⚠WARNING

The Batteries in this machine contain sulfuric acid, which causes burns to skin. If battery acid contacts clothing or skin, rinse the effected area with cold water immediately. If battery acid gets on your face or in your eyes, flush the area immediately with cold water and seek medical attention.

⚠WARNING

Dress safely. Do not wear rings or metal wrist watches when servicing this machine, as they can cause an electrical short circuit which can cause serious burns.

INSPECTION AND CLEANING:

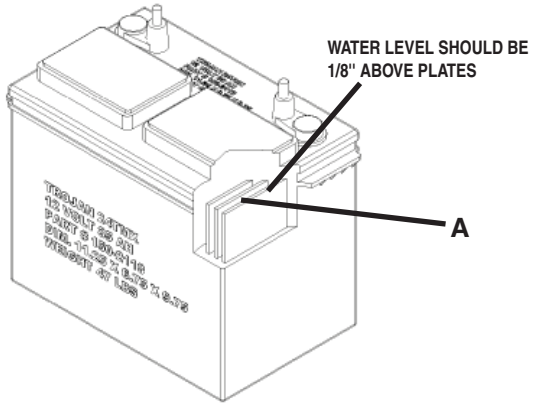
- Keep Batteries clean and dry from residue
- Check that all vent caps are tight
- Use a solution of baking soda and water to clean if acid residue on Batteries or corrosion on the terminals
- Protective spray of petroleum jelly should be applied to terminals to reduce corrosion

STORAGE:

- Batteries should be fully charged prior to and during storage
- Never store discharged Batteries
- Store Batteries in a cool, dry place but never below freezing - Recharge in storage a minimum of every 30 days
- Recharge Batteries before putting them back into service

WATERING:

- Add water, NEVER ACID, to cells *(distilled water recommended)*.
- Do not over water
- Before charging the Batteries, only add water if the plates are exposed. Add just enough water to cover the plates, then charge the batteries. Once fully charged, add water to the proper level as indicated below.
- For full charge plus series Batteries add water to the maximum water level indicator ***(A)***.
- Water watering, secure vent caps back on Batteries.

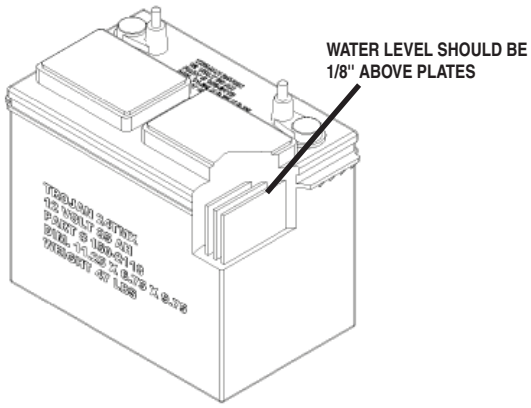


DAILY MAINTENANCE:

1. Remove the clean Pads or Brushes. Never use soiled Pads when cleaning. Replace Pads when they become packed with residue.
2. Remove and clean debris from the Vacuum Shut-Off screen and Drain Saver Basket located inside the Recovery Tank.
3. Drain and rinse Recovery Tank thoroughly.
4. Inspect Vacuum Hose for any objects obstructing the air flow.
5. Raise Squeegee and wipe Blades with a clean cloth. Store Squeegee in the raise position to prevent damage or setting of the Blades.
6. Wipe down machine if needed. Use a non-abrasive, non-solvent cleaner or a clean damp cloth.
7. Recharge the Batteries if needed.

WEEKLY MAINTENANCE:

1. Check Battery water level in each cell of the Batteries and fill as needed. Always use distilled water to refill Batteries. Batteries should be filled approximately ¾" to 1" above the plates. Overfilling will cause the Batteries to leak during charging. The charging process creates gas bubbles inside the Battery, which effectively increases the volume of the electrolyte.



2. Clean Battery tops to prevent corrosion.
3. Flip Scrubdeck Brushes / Pads.
4. Drain and rinse tanks thoroughly. To thoroughly flush out any solution chemicals in solution line valves, refill solution tank with a few gallons of warm, clean water and run the machine until tank is empty.
5. Remove and Clean Solution Filter Screen.

MONTHLY MAINTENANCE:

1. Check Scrubdeck and Squeegee lifting cables for wear and spring tension.
2. Check machine for water leaks and loose nuts and bolts.
3. Check to see if Battery cables are tightened. Tighten, if needed:
   OEM Trojan WET Batteries - *100 in/lbs*
   OEM Full River AGM Batteries - *90in/lbs*
4. Grease Squeegee Pivot Point.

YEARLY MAINTENANCE:

Call your local dealer for yearly maintenance.

STORING MACHINE:

1. Be sure to flush the Tanks out completely. To thoroughly flush out any solution chemicals in solution line and valves, refill Solution Tank with a few gallons of warm clean water and run machine until Tank is empty.
2. Open the Recovery Tank lid to promote air circulation.
3. Raise Scrubdeck and Squeegee.

CHECKING BATTERY SPECIFIC GRAVITY:

Use a hydrometer to check the Battery specific gravity.
Checking Gravity:
- Hydrometer
- Battery

NOTICE

Do not take readings immediately after adding distilled water. If water and acid are not thoroughly mixed, the reading may not be accurate.

Check the hydrometer against this chart

SPECIFIC GRAVITY @ 80°F (27°C)	BATTERY CONDITION
1.265	100% Charged
1.225	75% Charged
1.190	50% Charged
1.155	25% Charged
1.120	Discharged

NOTICE

If the readings are taken when the battery electrolyte is any temperature other than 80°F(27°C), the reading must be temperature corrected. To find the corrected specific gravity reading when the temperature of the battery electrolyte is other than 80°F(27°C): add (+) to the specific gravity reading 0.004 (4 points), for each 10°F(6°C) above 80°F(27°C). Subtract (-) from the specific reading 0.004 (4 points), for each 10°F(6°C) below 80°F(27°C).

RS PM RECORDS

CUSTOMER INFORMATION			
CUSTOMER		EMAIL	
ADDRESS			PHONE
CITY	STATE	ZIP	CONTACT

MACHINE INFORMATION	
MODEL #:	SERIAL #:
WORK ORDER#:	HOUR METER (Key):
CHASSIS HOUR METER:	HOUR METER (Traction):
RECHARGE NUMBER:	HOUR METER (Scrub):
ISOLATOR HOUR METER:	HOUR METER (Vac):
NOTE: Isolators need to be replaced on Scrubber Machines at 1000 Hours or Annually	

BATTERY CONDITION	CELL 1	CELL 2	CELL 3	CELL 4	CELL 5	CELL 6
BATTERY 1 HYDROMETER						
BATTERY 1 ELECTROLYTE CLARITY *(Clear, Cloudy, Particulate, Dark)*						
BATTERY 1 WATER LEVEL *(Overfilled, Full, Low, Dry)*						
BATTERY 2 HYDROMETER						
BATTERY 2 ELECTROLYTE CLARITY *(Clear, Cloudy, Particulate, Dark)*						
BATTERY 2 WATER LEVEL *(Overfilled, Full, Low, Dry)*						
BATTERY 3 HYDROMETER						
BATTERY 3 ELECTROLYTE CLARITY *(Clear, Cloudy, Particulate, Dark)*						
BATTERY 3 WATER LEVEL *(Overfilled, Full, Low, Dry)*						
CLEAN BATTERY TOPS. CHECK BATTERY CABLE AND TERMINAL CONDITION.						
NOTES:						

PAD/BRUSH CONDITION			
SCRUB BRUSH FIBER LENGTH	ROTATED BRUSHES		
BROOM DRIVER SOCKETS (4)	GOOD	WORN	NEEDS REPLACEMENT
DRIVER IDLER HUBS	GOOD	WORN	NEEDS REPLACEMENT
DISK PAD DRIVER	GOOD	WORN	NEEDS REPLACEMENT
EDGE PAD GRIP FACE	GOOD	WORN	NEEDS REPLACEMENT

CHECK OPERATION AND CONDITION OF:	IN SPEC	REPAIR	PROBLEM
STEERING WHEEL TILT MECHANISM			
MAIN POWER SWITCH OR KEY SWITCH			
BATTERY HOUR GAUGE			
BRUSH AMP GAUGE			
REVERSE SWITCH			
BRUSH SWITCH			
SOLUTION SWITCH			
SOLUTION SOLENOID			
SOLUTION LEVER			
BRUSH DECK LIFT SYSTEM			
BRUSH MOTORS			
VACUUM SWITCH			

VACUUM MOTOR PERFORMANCE			
SQUEEGEE LIFT LEVER			
SQUEEGEE ADJUSTMENT PITCH AND HEIGHT			
SQUEEGEE BLADES			
DRAIN HOSE AND PLUG			
SPRAY JET PUMP, HOSE & NOZZLE (OPTIONAL)			
BATTERY CHARGER CONNECTION & FUNCTION			
PITCH OF SCRUBDECK (MUST BE LEVEL)			
FOOTPEDAL			
PARKING BRAKE (MUST HOLD AUTOMATICALLY)			
BACK UP ALARM (REVERSE ONLY)			

CLEAN AND / OR LUBRICATE	IN SPEC	REPAIR	PROBLEM
SQUEEGEE PIVOT POINTS & KNOBS			
SOLUTION FILTER CLEANING			
SCRUB DECK LINKAGE			
STEERING CHAIN			

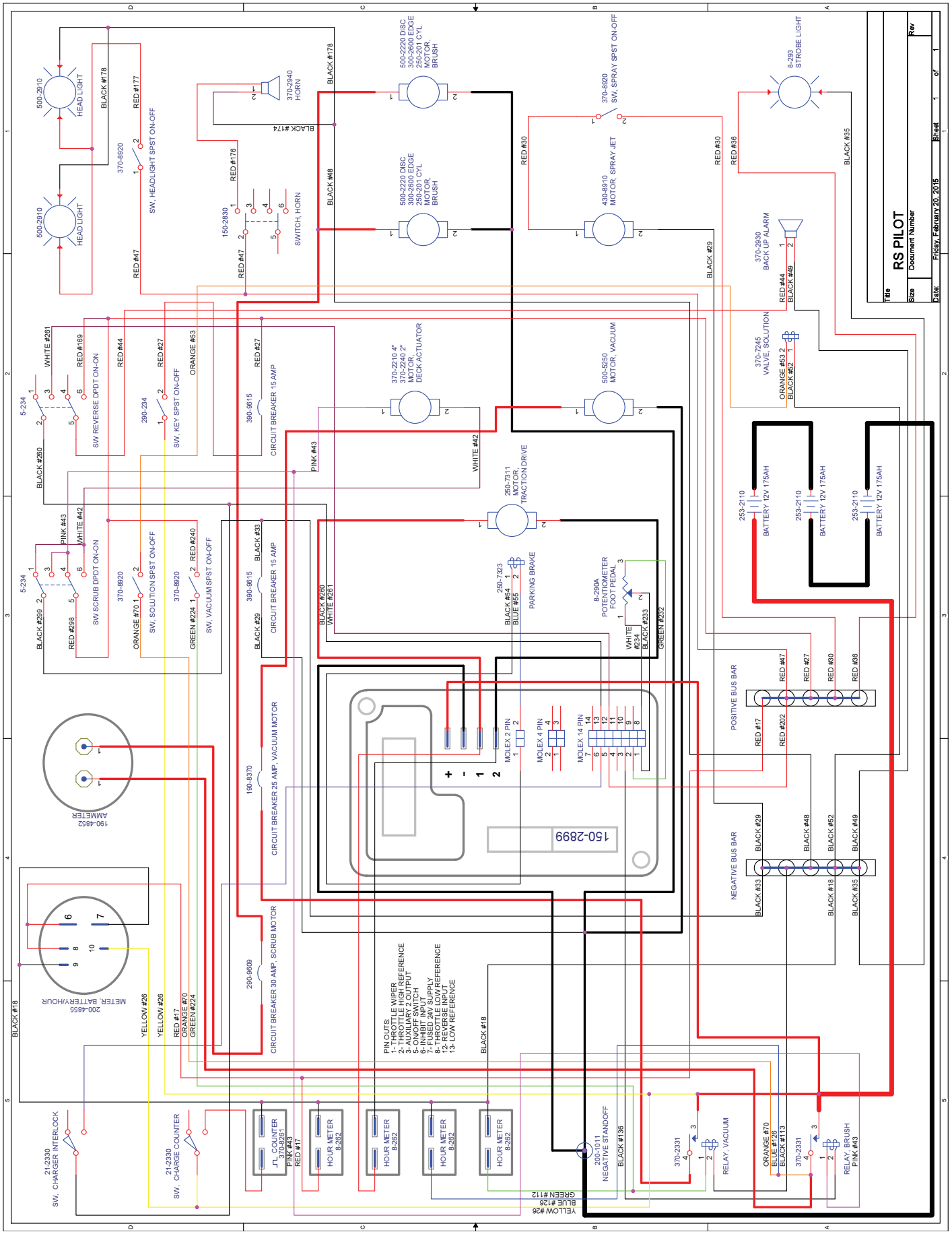
VISUALLY INSPECT	IN SPEC	REPAIR	PROBLEM
SOLUTION TANK CONDITION			
RECOVERY TANK & GASKET CONDITION			
DRAIN SAVER			
VACUUM FLOATS & SCREENS			
VACUUM HOSES			
SOLUTION HOSES			
BLADE RETAINERS & HARDWARE			
SQUEEGEE WHEELS			
BRUSH SKIRTS			
REAR WHEELS CONDITION			
DRIVE WHEEL CONDITION			

COMMENTS

SERVICING DISTRIBUTOR: _____

TECHNICIAN'S NAME: _____ DATE: _____ SIGNATURE: _____

CUSTOMER'S NAME: _____ DATE: _____ SIGNATURE: _____


RS PILOT
Title
Size
Document Number
Rev
Date: Friday, February 20, 2015
Sheet 1 of 1
500-2910 HEAD LIGHT
370-8920 SW, HEADLIGHT SPST ON-OFF
370-2940 HORN
150-2830 SWITCH, HORN
500-2220 DISC 300-2600 EDGE 250-201 CYL MOTOR, BRUSH
370-8920 SW, SPRAY SPST ON-OFF
430-8910 MOTOR, SPRAY JET
8-238 STROBE LIGHT
370-2930 BACK UP ALARM
370-7245 VALVE, SOLUTION
370-2210 4" 370-2240 2" MOTOR, DECK ACTUATOR
500-5250 MOTOR, VACUUM
250-7311 MOTOR, TRACTION DRIVE
5-234 SW REVERSE DPDT ON-ON
290-234 SW, KEY SPST ON-OFF
390-9615 CIRCUIT BREAKER 15 AMP
5-234 SW SCRUB DPDT ON-ON
370-8920 SW, SOLUTION SPST ON-OFF
370-8920 SW, VACUUM SPST ON-OFF
250-7323 PARKING BRAKE
8-230A POTENTIOMETER FOOT PEDAL
253-2110 BATTERY 12V 175AH
190-8370 CIRCUIT BREAKER 25 AMP, VACUUM MOTOR
290-9609 CIRCUIT BREAKER 30 AMP, SCRUB MOTOR
190-8652 AMMETER
200-8855 METER, BATTERY/HOUR
MOLEX 2 PIN
MOLEX 4 PIN
MOLEX 14 PIN
150-2899
POSITIVE BUS BAR
NEGATIVE BUS BAR
PIN OUTS:
1- THROTTLE WIPER
2- THROTTLE HIGH REFERENCE
3- AUXILIARY 2 OUTPUT
4- POWER SWITCH
6- INHIBIT INPUT
7- FUSED 24V SUPPLY
8- THROTTLE LOW REFERENCE
12- TRACTION RELAY
13- LOW REFERENCE
21-2330 SW, CHARGER INTERLOCK
21-2330 SW, CHARGE COUNTER
COUNTER 370-2261
HOUR METER 8-262
200-1011 NEGATIVE STAND/OFF
370-2331 RELAY, VACUUM
370-2331 RELAY, BRUSH

TROUBLE-SHOOTING

PROBLEM	CAUSE	SOLUTION
NO POWER - NOTHING OPERATES	FAULTY POWER SWITCH	CONTACT LOCAL SERVICING DEALER
	BATTERIES NEED CHARGING	SEE **CHARGING BATTERIES**
	FAULTY BATTERIES	REPLACE BATTERY
	LOOSE BATTERY CABLE	TIGHTEN LOOSE CABLE
	MAIN CIRCUIT BREAKER TRIPPED	WAIT 5 MINUTES FOR AUTO RESET DETERMINE CAUSE AND CORRECT
SCRUBMOTOR DOES NOT OPERATE	FOOT PEDAL IS NOT DEPRESSED	DEPRESS FOOT PEDAL
	CIRCUIT BREAKER TRIPPED	RESET AND REDUCE PRESSURE
	FAULTY SCRUBDECK MOTOR OR WIRE	CONTACT LOCAL SERVICING DEALER
VACUUM MOTOR DOES NOT OPERATE	FAULTY VACUUM SWITCH	REPLACE SWITCH
	CIRCUIT BREAKER TRIPPED	RESET AND CHECK HOSE DETERMINE CAUSE AND CORRECT
	FAULTY VACUUM MOTOR	CONTACT LOCAL SERVICING DEALER
	CARBON BRUSHES WORN	CONTACT LOCAL SERVICING DEALER
INSUFFICIENT SOLUTION FLOW	SOLUTION TANK LOW	REFILL SOLUTION TANK
	FLOW LEVER TURNED DOWN	TURN LEVER MORE OPEN
	SOLUTION FILTER CLOGGED	REMOVE COVER AND CLEAN
	SOLUTION LINE CLOGGED	REMOVE AND BLOW OUT WITH COMPRESSED AIR
	SOLUTION VALVE CLOGGED	REMOVE COVER AND CLEAN
NO SOLUTION FLOW	NO SOLUTION IN TANK	FILL SOLUTION TANK
	SOLUTION SWITCH IS OFF	TURN SOLUTION SWITCH ON
	SOLUTION SCREEN IS CLOGGED	REMOVE AND CLEAN SCREEN
	SOLUTION SUMP CLOGGED	REMOVE DEBRIS
	FAULTY SOLUTION SOLENOID	CONTACT LOCAL SERVICING DEALER
	FAULTY SOLUTION SWITCH	CONTACT LOCAL SERVICING DEALER
POOR WATER RECOVERY	RECOVERY TANK IS FULL	EMPTY RECOVERY TANK
	BALL/SCREEN IS CLOGGED	REMOVE SCREEN AND CLEAN
	VACUUM HOSE IS CLOGGED	REMOVE DEBRIS
	SQUEEGEE IS CLOGGED	REMOVE DEBRIS
	SQUEEGEE BLADE IS WORN	ROTATE OR REPLACE BLADES
	FAULTY VACUUM HOSE	CONTACT LOCAL SERVICING DEALER
	VACUUM MOTOR GASKET TORN	CONTACT LOCAL SERVICING DEALER
	TANK GASKET FAULTY	CONTACT LOCAL SERVICING DEALER
	DRAIN PLUG LOOSE	TIGHTEN PLUG
	VACUUM MOTOR FAULTY	CONTACT LOCAL SERVICING DEALER
	BATTERY CHARGE LOW	CHARGE BATTERIES OVERNIGHT

PROBLEM	CAUSE	SOLUTION
POOR WATER RECOVERY ON TURNS	WIPERS WORN	REPLACE WIPER MATERIAL
	WIPERS CHATTER	TIGHTEN PIVOT POINTS
	SQUEEGEE SWING IS BINDING	CONTACT LOCAL SERVICING DEALER
	INCORRECT SQUEEGEE SIZE	CONTACT LOCAL SERVICING DEALER
POOR TRACTION	EXCESSIVE BRUSH PRESSURE	REDUCE PRESSURE WITH SWITCH
	WORN DRIVE TIRE	REPLACE TIRES
	HEAVY SOAP CONCRENTRATION	CONTACT LOCAL SERVICING DEALER
PARKING BRAKE DOESN'T WORK	NOT ON A LEVEL FLOOR	MOVE TO LEVEL SURFACE TO PARK MACHINE
	OVERRIDE LEVER IN OFF POSITION	RESET LEVER INTO CORRECT POSITION
	PARKING BRAKE MALFUNCTION	CONTACT LOCAL SERVICING DEALER
SHORT RUN TIME	BATTERIES RUN DOWN	CHARGE BATTERIES TWICE
	BATTERIES STILL DOWN	CONTACT LOCAL SERVICING DEALER
	BATTERIES LOW ON WATER	FILL WITH DISTILLED WATER TO ¾" ABOVE THE LEAD PLATES
	BATTERIES OVER CYCLED	CONTACT LOCAL SERVICING DEALER

BODY CONSTRUCTION/DIMENSIONS	RS
Tank Material:	Poly (⅜") (0.9525 cm)
Chassis Construction:	⅛" Steel (.3 cm)
Rear Wheels:	(2×) 12" × 3" [(2×) 30.5 × 7.6 cm]
Size (L × W × H):	48" × 24" × 55" (122 × 61 × 140 cm)
Weight (without Batteries):	550 lb (249 kg)
Weight (with standard Batteries):	850 lb (386 kg)

SCRUBDECK SYSTEM	
Disk Brush Size:	20-D: (1×) 20" (51 cm) 26-D: (2×) 13" (33 cm) 28-D: (2×) 14" (36 cm)
Disk Scrubdeck Motor:	20" (1×) .75 hp (559 watts) / 200 rpm 26" & 28" (2×) .75 hp (559 watts) / 300 rpm
EDGE Pad Size:	24-E: (1×) 28"×14" (71 × 35 cm) 28-E: (1×) 32"×14" (81 × 35 cm)
EDGE Scrubdeck Motor:	(1×) 1.0 hp (746 watts) / 2500 rpm
Optional EDGE Scrubdeck Motor:	(1×) 1.2 hp (746 watts) / 2900 rpm
Scrubdeck Down Pressure:	0-150 lb (0-68 kg)

SOLUTION SYSTEM	
Solution Tank Capacity:	22 gal (86 liters)
Solution Flow Rate:	0 - 0.75 gpm (0 - 4 lpm)
Solution Filter:	Stainless / In-line

RECOVERY SYSTEM	
Recovery Tank Capacity:	23 gal (87 liters)
Vacuum Power:	1.0 hp or 2.0 hp (745 watts)
Drain Hose:	2" Diameter (5 cm)
Vacuum Specs (Lift/Airflow):	68" / 70 cfm (172 cm / 21cmm)
Demisting Chamber:	1 gal (3.8 liters)
Drain Saver Basket:	263 in^3 (4,313 cm^3)

BATTERY SYSTEM	
System Voltage:	36 Volts
Standard Battery Ah Rating:	(3×) 175 Ah
Optional Battery Ah Rating:	Up to (3×) 225 Ah
Battery Run Time (Standard):	Up to 4 Hrs
Charger (Automatic):	25 Amp

DRIVE SYSTEM	
Standard Drive:	1.0 hp (745 watts), Sealed
Speed Control:	Variable 0-320 ft/min

PRODUCTIVITY	
Scrubbing Width & Rate/Hour:	Up to 23,034 sq.ft/hr (2,140 sq.m/hr)

COMMON WEAR PARTS

ROUND DISK BRUSHES:

NOTICE

The ## in Disk Column Denotes Desk Pad Size: 13", 14" or 20"

BRUSHES	DISK	LEVEL
Super Grit	##-421SS	Very High
Tough Grit	##-421S	High
Midi Grit	##-421C	Medium
Light Grit	##-421PS	Moderate
Poly (.028)	##-421P	Light
Nylon (.016)	##-421N	Light
Tampico	##-421T	Light
Pad Driver	##-421D	
Diamond Driver	##-421DD	

ROUND DISK PADS:

NOTICE

The ## in Disk Column Denotes Desk Pad Size: 13", 14" or 20"

DISK PADS	DISK	LEVEL	COLOR
Super Black	##-422BB	Very High	Black
Black	##-422B	High	Black
Brown	##-422BR	High	Brown
Green	##-422G	Medium	Green
Blue	##-422BL	Moderate	Blue
Red	##-422R	Moderate	Red
White	##-422W	Light	White

EDGE PADS AND SCREENS:

DESCRIPTION	24"×14" SCRUBDECK	28"×14" SCRUBDECK
White Pad	N/A	EDGE-4054
Red Pad	EDGE-2404	EDGE-4053
Blue Pad	EDGE-2403	EDGE-4052
Green Pad	EDGE-2402	EDGE-4051
Black Pad	EDGE-2401	EDGE-4050
White Driver Pad	N/A	EDGE-4058
60 Grit Sand Screen	N/A	EDGE-4059
80 Grit Sand Screen	N/A	EDGE-4060
100 Grit Sand Screen	N/A	EDGE-4061
120 Grit Sand Screen	N/A	EDGE-4062
150 Grit Sand Screen	N/A	EDGE-4063
20 Grit Sand Paper	N/A	
36 Grit Sand Paper	N/A	
60 Grit Sand Paper	N/A	
80 Grit Sand Paper	N/A	N/A
100 Grit Sand Paper	N/A	N/A
400 Grit Diamond Polishing Pad	N/A	EDGE-4013
800 Grit Diamond Polishing Pad	N/A	EDGE-4014
1500 Grit Diamond Polishing Pad	N/A	EDGE-4015
3000 Grit Diamond Polishing Pad	N/A	EDGE-4016
6000 Grit Diamond Polishing Pad	N/A	EDGE-4070
Tile/Grout Renovator Pad	N/A	EDGE-4048
Dominator HD Strip Pad	N/A	EDGE-4055
Maroon ECO Prep Pad	EDGE-2407	EDGE-4056

SQUEEGEE BLADE KITS & COMPLETE SQUEEGEE ASSEMBLIES:

SQUEEGEE SIZE	20" DISK DECKS	24" EDGE DECKS	26" DISK DECKS	28" EDGE DECKS	28" DISK DECKS
26" Squeegee	Optional	Optional	Optional	Optional	Optional
30" Squeegee	Standard	Optional	Optional	Optional	Optional
34" Squeegee	Optional	Standard	Standard	Standard	Standard

SQUEEGEE SIZE	GUM RUBBER BLADE KIT	LINATEX BLADE KIT	URETHANE BLADE KIT	COMPLETE SQUEEGEE ASSEMBLIES
26" Squeegee	130-770G	130-770L	130-770U	130-7180
30" Squeegee	150-770G	150-770L	150-770U	150-7180
34" Squeegee	180-770G	180-770L	180-770U	180-7180

SQUEEGEE MATERIAL:	USED FOR:
LINATEX	Provides best wear and tear resistant. Not designed for use with chemicals.
URETHANE	Provides best resistance when dealing with harsh chemicals, oils, fuels, etc.
GUM	Provides best drying preformance on rough/grouted floor types by sealing over irregularities.

NOTICE

Squeegee blade kits include (1) Rear Blade, (1) Front Blade, and (2) Backup Wheels with hardware.

NOTICE

Squeegee Assemblies (complete) listed above all come with Linatex blades.

NOTICE

Size is stamped into the top of the painted steel squeegee body on all squeegee's.

NOTICE

The 26" squeegee is designed for narrow aisles and may not have the same water control around tight turns as the large squeegees.

STANDARD WARRANTY POLICY

RPS Corporation warrants its Machines and Original Equipment Accessories to be free of manufacturer's defects in materials or workmanship for the periods specified below. Warranty will be granted at the sole discretion of RPS Corporation and is subject to final claim and parts review by RPS Corporation and its vendors. This policy is effective January 1, 2014 and is subject to change on production units at a future date.

COVERAGE, EXCLUSIONS AND LIMITATIONS:

BATTERY POWERED MACHINES:

PARTS: 36 months or 1,500 hours (Power On meter)
LABOR: 12 months
TRAVEL: 3 months (150 mile maximum)
POLY TANKS: 7 Years or 3,000 hours (Water must not exceed 135°F/57°C)
Freight coverage for 3 Years under the parts section of warranty.

AC POWERED MACHINES:

FLOOR MACHINES: All EDGE and ORBITZ Models
PARTS: 1 Year
LABOR: 90 Days
MOTOR: 2 Years(1,500 hour)

ZERO$_3$ WALL MOUNT/PORTABLE UNITS: Unit Must be Shipped back to Factory
PARTS: 6 Month

BACKPACK VACUUMS: Unit Must be Shipped back to Factory
PARTS: 3 Years / Lifetime Housing Warranty
LABOR: 3 Years

CARPET SPOTTER/EXTRACTOR: Unit Must be Shipped back to Factory
PARTS: 3 Years
LABOR: 3 Years

NEW PARTS: 90 day warranty on OEM replacement parts (when installed by an authorized dealer)

VALIDITY: Machine is serviced by Factory Authorized Personnel and a fully completed Machine Delivery Form (online or fax) is on record at RPS Corporation.

LIMITATION: Warranty will begin on date of machine installation to end-user or 6 months after shipment from RPS Corporation to the distributor if unsold at that time.

This warranty includes all parts and original equipment accessories on the machine except **normal wear items**.
Some examples of these wear item exclusions are:

- EDGE/ORBITZ isolators (1,000 hours on average)
- EDGE/ORBITZ Grip Face
- Squeegee Blades, Wiper Blades, Skirts and Curtains.
- Caster Wheels, Squeegee Wheels and Bumpers.
- Lights (Strobe, Headlights, or Bulbs).
- Chains and Belts.
- Filters, Screens, and Vacuum Bags.
- Motor Brushes and/or commutator wear.
- Brooms, Brushes, Pads and Pad Retainers.
- Hoses and Tubing.
- Drive Tires, Foam Filled/Pneumatic Wheels, Tubes or Valve Stems.
- Rubber Floor Seals or Gaskets.
- Vacuum motors with evidence of moisture or debris intrusion or > 400 hours.
- Batteries (see below)

NOT COVERED: Routine maintenance, adjustments or parts damaged from abuse, neglect, improper use of the machine, or lack of scheduled "daily, weekly, monthly" maintenance in accordance with our published PM Sheets.

BATTERIES: Warranted through the battery manufacturer for One Year (pro-rated) from the date of delivery. The battery manufacturer approves or denies the warranty coverage after their analysis. Labor and Travel credit through RPS is applicable once a warranty defect has been confirmed.

NOT COVERED: Damage from lack of maintenance/lack of water, use of a non-OEM charger, or use of non-distilled water.

BATTERY TERMINALS: Battery terminals and cable connections are covered for 30 days from the shipment of the machine. (Battery terminals and cables should be inspected, cleaned and secured upon installation of the machine and then every 30 days thereafter.)

MACHINE INSTALL / WARRANTY REGISTRATION

Installing Dealer: _____ **Installed By:** _____

Location: (City, State): _____ **Install Date:** _____

End-User Company Name: _____ **End-User Contact:** _____

Address: _____ **City/State:** _____ **Zip:** _____

Phone: _____ **Fax:** _____ **Email:** _____

Model: _____ **Serial #:** _____ **Hour Meter:** _____

BUYER'S REPRESENTATIVE HAS RECEIVED INSTRUCTION IN PROPER OPERATION OF THE FOLLOWING CONTROLS AND FEATURES:

SCRUBBERS:

- ☐ - Filling solution tank, Solution tank sight tube, Solution drain hose or valve for flushing and freezing conditions
- ☐ - Adjusting controls & operation, Double scrubbing, Squeegee lift delay, High Recovery RED Light, vacuum switch (horn honking) and vacuum timer
- ☐ - Recovery tank draining & cleaning in APPROVED locations only, Common Squeegee hose clog points, vacuum screen removal and cleaning, drain saver basket emptied
- ☐ - Shroud and pad/brush removal and installation
- ☐ - Side Wiper and Curtain adjustment and maintenance for water control
- ☐ - Solution valve and filter operation (removal and cleaning)
- ☐ - LCD display operation, 4 hour meters (key switch, brush, traction drive, vacuum)
- ☐ - Tank tilt back feature, only when both tanks are fully drained
- ☐ - Squeegee hose removal and checking for clogs

BURNISHERS

- ☐ -Train and have customer demonstrate proper removal and replacement of burnishing pad
- ☐ - Pad pressure gauge and proper operating range to avoid tripping the circuit breaker

SWEEPERS

- ☐ - Demonstrate proper removal and replacement of main broom and side brooms
- ☐ - Method for cleaning the dust filter, emptying out the debris hopper and correct installation
- ☐ - Correct operation of the main broom and side broom levers, and understands to park with brushes in UP position
- ☐ - Trained on the "Wet-Sweep" bypass door and not to operate through standing water

EDGE / ORBITZ MACHINES

- ☐ - EDGE / ORBITZ scrubbers must have their isolators & deck hour meter replaced every 1,000 hours of use
- ☐ - Customer understands the Grip Face is not warranted against damage from improper use or direct contact with the floor

ALL MACHINES

- ☐ - Checking for proper battery electrolyte level, electrolyte condition monthly, and check that battery terminals are properly torqued to 10ft/lbs
- ☐ - Parking Brake works and Park Brake Override functions if installed / Always park on a solid and level surface, NEVER on a movable or inclinded surface
- ☐ - Charging operation and customer understands batteries have limited "cycles" and recharging = 1 cycle
- ☐ - Seat and steering wheel adjustment
- ☐ - Customer has read and understands the list of WARNINGS/CAUTIONS in the Operator manual
- ☐ - Battery and Machine Maintenance Guide posters hung up and reviewed
- ☐ - Manufacturer's website is a good source of information (Videos, PM Sheets) and sign up for quarterly newsletters
- ☐ - Operators and Parts manuals were delivered, reviewed, understood, and confirmation preventive maintenance is done every 100 hours of use and recorded on PM Sheets provided online or in manuals

Installed By (print) _____ **Signature** _____

Buyers Representative (print) _____ **Signature** _____

Buyer agrees to pay for any repairs, adjustments, or secondary training that manufacturer determines is excluded from the warranty.

Complete Online at www.rpscorporation.com

BLANK

THIS PAGE WAS INTENTIONALLY LEFT BLANK

TOMCAT®
COMMERCIAL CLEANING EQUIPMENT
1711 South Street
Racine, WI 53404
www.tomcatequip.com
Tel. US: 800-450-9824
Tel. Int: (001) 262-681-6470

© RPS Corporation 2015